MAXX GEAR Metal Putty



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

1.1 Product identifier: MAXX GEAR Metal Putty

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

Relevant uses: Fillers

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Rakennuskemia Oy
Kerkkolankatu 17
05800 Hyvinkää - Finland
Phone.: +358 19 4574400
info@rakennuskemia.com
www.rakennuskemia.com

1.4 Emergency telephone number:

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Eye Irrit. 2: Eye irritation, Category 2, H319
Flam. Liq. 3: Flammable liquids, Category 3, H226
Repr. 2: Reproductive toxicity, Category 2, H361d
Skin Irrit. 2: Skin irritation, Category 2, H315
STOT RE 2: Specific target organ toxicity by inhalation, repeated exposure, Category 2, H373

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Warning



Hazard statements:

Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 3: H226 - Flammable liquid and vapour
Repr. 2: H361d - Suspected of damaging the unborn child.
Skin Irrit. 2: H315 - Causes skin irritation
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Inhalation)

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P260: Do not breathe vapours
P280: Wear protective gloves/eye protection
P281: Use personal protective equipment as required
P314: Get medical advice/attention if you feel unwell
P405: Store locked up
P501: Dispose of contents/container according to the separated collection system used in your municipality

UFI: F7DY-285K-Y30M-CH8C

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Non-applicable

3.2 Mixture:

Chemical description: Filler

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 7727-43-7 EC: 231-784-4 Index: Non-applicable REACH: 01-2119491274-35-XXXX	**Barium Sulfate(1)**	Not classified	**5 - <10 %**
	Regulation 1272/2008		
CAS: 100-42-5 EC: 202-851-5 Index: 601-026-00-0 REACH: 01-2119457861-32-XXXX	**styrene(1)**	ATP ATP06	**5 - <10 %**
	Regulation 1272/2008	Acute Tox. 4: H332; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Repr. 2: H361d; Skin Irrit. 2: H315; STOT RE 1: H372 - Danger 	
CAS: 25013-15-4 EC: 246-562-2 Index: Non-applicable REACH: 01-2119622074-50-XXXX	**Vinyltoluene(1)**	Self-classified	**<2,5 %**
	Regulation 1272/2008	Aquatic Chronic 2: H411; Flam. Liq. 3: H226 - Warning 	

(1) Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

The content of Benzene (EINECS-Nr. 200-753-7) in the ingredients is less than 0,1% (Note P Annex 1A 1272/2008 EU), so the classification as carcinogen need not to apply.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

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SECTION 5: FIREFIGHTING MEASURES (continued)

5.1 Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO_2). IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,…) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

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SECTION 7: HANDLING AND STORAGE (continued)

PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in designated areas that comply with the necessary safety conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to small amounts only. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Identification	Occupational exposure limits		
Barium Sulfate	IOELV (8h)		0.5 mg/m³
CAS: 7727-43-7 EC: 231-784-4	IOELV (STEL)		

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Barium Sulfate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 7727-43-7	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 231-784-4	Inhalation	Non-applicable	Non-applicable	10 mg/m³	10 mg/m³
styrene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 100-42-5	Dermal	Non-applicable	Non-applicable	406 mg/kg	Non-applicable
EC: 202-851-5	Inhalation	289 mg/m³	306 mg/m³	85 mg/m³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Barium Sulfate	Oral	Non-applicable	Non-applicable	13000 mg/kg	Non-applicable
CAS: 7727-43-7	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 231-784-4	Inhalation	Non-applicable	Non-applicable	10 mg/m³	Non-applicable
styrene	Oral	Non-applicable	Non-applicable	2,1 mg/kg	Non-applicable
CAS: 100-42-5	Dermal	Non-applicable	Non-applicable	343 mg/kg	Non-applicable
EC: 202-851-5	Inhalation	174,25 mg/m³	182,75 mg/m³	10,2 mg/m³	Non-applicable

PNEC:

Identification				
Barium Sulfate	STP	62,2 mg/L	Fresh water	0,115 mg/L
CAS: 7727-43-7	Soil	207,7 mg/kg	Marine water	Non-applicable
EC: 231-784-4	Intermittent	Non-applicable	Sediment (Fresh water)	600,4 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
styrene	STP	5 mg/L	Fresh water	0,028 mg/L
CAS: 100-42-5	Soil	0,2 mg/kg	Marine water	0,014 mg/L
EC: 202-851-5	Intermittent	0,04 mg/L	Sediment (Fresh water)	0,614 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,307 mg/kg

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 2016/425/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.
All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	CE CAT III	EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves	CE CAT III	EN ISO 374-1:2016 EN 16523-1:2015 EN 420:2003+A1:2009	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield	CE CAT II	EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	CE CAT III	EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	CE CAT III	EN ISO 13287:2012 EN ISO 20345:2011 EN 13832-1:2019	Replace boots at any sign of deterioration.

F.- Additional emergency measures

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	12,5 % weight
V.O.C. density at 20 ºC:	136,88 kg/m³ (136,88 g/L)
Average carbon number:	8,2
Average molecular weight:	107 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Fluid
Colour:	According to the markings on the package
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	145 ºC
Vapour pressure at 20 ºC:	2301 Pa
Vapour pressure at 50 ºC:	12126,83 Pa (12,13 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	1095 kg/m³
Relative density at 20 ºC:	1,095
Dynamic viscosity at 20 ºC:	1,29 cP
Kinematic viscosity at 20 ºC:	1,18 cSt
Kinematic viscosity at 40 ºC:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *
Solubility in water at 20 ºC:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Oxidising properties:	Non-applicable *
Flammability:	
Flash Point:	31 ºC
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	480 ºC
Lower flammability limit:	Not available
Upper flammability limit:	Not available
Explosive:	
Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *

9.2 Other information:

Surface tension at 20 ºC:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
  IARC: Vinyltoluene (3); styrene (2A)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Suspected of damaging the unborn child.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Barium Sulfate	LD50 oral	15000 mg/kg	Rat
CAS: 7727-43-7	LD50 dermal	>2000 mg/kg	
EC: 231-784-4	LC50 inhalation	>5 mg/L (4 h)	
Vinyltoluene	LD50 oral	5100 mg/kg	Rat
CAS: 25013-15-4	LD50 dermal	>2000 mg/kg	
EC: 246-562-2	LC50 inhalation	>20 mg/L (4 h)	
styrene	LD50 oral	>2000 mg/kg	
CAS: 100-42-5	LD50 dermal	>2000 mg/kg	
EC: 202-851-5	LC50 inhalation	12 mg/L (4 h)	Rat

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Species	Genus
Barium Sulfate	LC50	76000 mg/L (96 h)	Salmo gairdneri	Fish
CAS: 7727-43-7	EC50	Non-applicable		
EC: 231-784-4	EC50	Non-applicable		
Vinyltoluene	LC50	7.6 mg/L (96 h)	Salmo gairdneri	Fish
CAS: 25013-15-4	EC50	1.3 mg/L (48 h)	Daphnia magna	Crustacean
EC: 246-562-2	EC50	2.6 mg/L (72 h)	Selenastrum capricornutum	Algae

12.2 Persistence and degradability:

Not available

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Vinyltoluene	BCF	5
CAS: 25013-15-4	Pow Log	3.44
EC: 246-562-2	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
styrene	Koc	Non-applicable	Henry	Non-applicable
CAS: 100-42-5	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 202-851-5	Surface tension	3,21E-2 N/m (25 ºC)	Moist soil	Non-applicable
Vinyltoluene	Koc	Non-applicable	Henry	Non-applicable
CAS: 25013-15-4	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 246-562-2	Surface tension	3,2E-2 N/m (20 ºC)	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP10 Toxic for reproduction, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION **

Transport of dangerous goods by land:

*** Changes with regards to the previous version*

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SECTION 14: TRANSPORT INFORMATION ** (continued)

With regard to ADR 2019 and RID 2019:



14.1	**UN number:**	UN3269
14.2	**UN proper shipping name:**	POLYESTER RESIN KIT, liquid base material
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	III
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Special regulations:	236, 340
	Tunnel restriction code:	E
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 39-18:



14.1	**UN number:**	UN3269
14.2	**UN proper shipping name:**	POLYESTER RESIN KIT, liquid base material
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	III
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Special regulations:	236, 340
	EmS Codes:	F-E, S-D
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
	Segregation group:	Non-applicable
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:



14.1	**UN number:**	UN3269
14.2	**UN proper shipping name:**	POLYESTER RESIN KIT, liquid base material
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	III
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

*** Changes with regards to the previous version*

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

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SECTION 15: REGULATORY INFORMATION (continued)

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

TRANSPORT INFORMATION (SECTION 14):
- UN number
- Packing group

Texts of the legislative phrases mentioned in section 2:

H226: Flammable liquid and vapour
H315: Causes skin irritation
H319: Causes serious eye irritation
H361d: Suspected of damaging the unborn child.
H373: May cause damage to organs through prolonged or repeated exposure (Inhalation)

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H332 - Harmful if inhaled
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects
Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 3: H226 - Flammable liquid and vapour
Repr. 2: H361d - Suspected of damaging the unborn child.
Skin Irrit. 2: H315 - Causes skin irritation
STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

- CONTINUED ON NEXT PAGE -



SECTION 16: OTHER INFORMATION (continued)

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -

MAXX GEAR Hardener Paste



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

1.1 Product identifier: MAXX GEAR Hardener Paste

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

Relevant uses: Fillers

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Rakennuskemia Oy
Kerkkolankatu 17
05800 Hyvinkää - Finland
Phone.: +358 19 4574400
info@rakennuskemia.com
www.rakennuskemia.com

1.4 Emergency telephone number:

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard, Category 1, H410
Eye Irrit. 2: Eye irritation, Category 2, H319
Org. Perox. D: Organic peroxides, Category D, H242
Skin Sens. 1: Sensitisation, skin, Category 1, H317

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger



Hazard statements:

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects
Eye Irrit. 2: H319 - Causes serious eye irritation
Org. Perox. D: H242 - Heating may cause a fire
Skin Sens. 1: H317 - May cause an allergic skin reaction

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P280: Wear protective gloves/eye protection
P302+P352: IF ON SKIN: Wash with plenty of water
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P403+P235: Store in a well-ventilated place. Keep cool
P501: Dispose of contents/container according to the separated collection system used in your municipality

Supplementary information:

Contains Dibenzoyl peroxide

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

3.2 Mixture:

Chemical description: Filler

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 94-36-0 EC: 202-327-6 Index: 617-008-00-0 REACH: 01-2119511472-50-XXXX	**Dibenzoyl peroxide** [1]	Self-classified	**25 - <50 %**
	Regulation 1272/2008	Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Irrit. 2: H319; Org. Perox. B: H241; Skin Sens. 1: H317 - Danger	
CAS: 131-11-3 EC: 205-011-6 Index: Non-applicable REACH: 01-2119437229-36-XXXX	**Dimethyl Phthalate**[1]	Not classified	**25 - <50 %**
	Regulation 1272/2008		
CAS: 107-21-1 EC: 203-473-3 Index: 603-027-00-1 REACH: 01-2119456816-28-XXXX	**Ethanediol**[1]	Self-classified	**5 - <10 %**
	Regulation 1272/2008	Acute Tox. 4: H302; STOT RE 2: H373 - Warning	
CAS: 67762-90-7 EC: Non-applicable Index: Non-applicable REACH: Non-applicable	**Siloxanes and Silicones, di-Me, reaction products with silica**[1]	Not classified	**5 - <10 %**
	Regulation 1272/2008		

[1] Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

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SECTION 5: FIREFIGHTING MEASURES (continued)

5.1 Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO_2). IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

- CONTINUED ON NEXT PAGE -



SECTION 7: HANDLING AND STORAGE (continued)

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Identification	Occupational exposure limits		
Ethanediol	IOELV (8h)	20 ppm	52 mg/m³
CAS: 107-21-1 EC: 203-473-3	IOELV (STEL)	40 ppm	104 mg/m³

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dibenzoyl peroxide	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 94-36-0	Dermal	Non-applicable	Non-applicable	13,3 mg/kg	Non-applicable
EC: 202-327-6	Inhalation	Non-applicable	Non-applicable	39 mg/m³	Non-applicable
Dimethyl Phthalate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 131-11-3	Dermal	Non-applicable	Non-applicable	135 mg/kg	Non-applicable
EC: 205-011-6	Inhalation	Non-applicable	Non-applicable	66,1 mg/m³	Non-applicable
Ethanediol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 107-21-1	Dermal	Non-applicable	Non-applicable	106 mg/kg	Non-applicable
EC: 203-473-3	Inhalation	Non-applicable	Non-applicable	Non-applicable	35 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dibenzoyl peroxide	Oral	Non-applicable	Non-applicable	2 mg/kg	Non-applicable
CAS: 94-36-0	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 202-327-6	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable
Dimethyl Phthalate	Oral	Non-applicable	Non-applicable	9,4 mg/kg	Non-applicable
CAS: 131-11-3	Dermal	Non-applicable	Non-applicable	67,5 mg/kg	Non-applicable
EC: 205-011-6	Inhalation	Non-applicable	Non-applicable	16,3 mg/m³	Non-applicable
Ethanediol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 107-21-1	Dermal	Non-applicable	Non-applicable	53 mg/kg	Non-applicable
EC: 203-473-3	Inhalation	Non-applicable	Non-applicable	Non-applicable	7 mg/m³

PNEC:

Identification				
Dibenzoyl peroxide	STP	0,35 mg/L	Fresh water	0,00002 mg/L
CAS: 94-36-0	Soil	0,003 mg/kg	Marine water	0,000002 mg/L
EC: 202-327-6	Intermittent	0,000602 mg/L	Sediment (Fresh water)	0,013 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,001 mg/kg
Dimethyl Phthalate	STP	4 mg/L	Fresh water	0,192 mg/L
CAS: 131-11-3	Soil	3,16 mg/kg	Marine water	0,019 mg/L
EC: 205-011-6	Intermittent	0,39 mg/L	Sediment (Fresh water)	1,3 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,13 mg/kg

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Ethanediol	STP	199,5 mg/L	Fresh water	10 mg/L
CAS: 107-21-1	Soil	1,53 mg/kg	Marine water	1 mg/L
EC: 203-473-3	Intermittent	10 mg/L	Sediment (Fresh water)	37 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	3,7 mg/kg

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.
All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	CE CAT III	EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks	CE CAT I		Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2003+A1:2009 and EN ISO 374-1:2016

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	CE CAT II	EN 166:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Antistatic and fireproof protective clothing	CE CAT III	EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2001 EN ISO 14116:2015 EN 1149-5:2018	Limited protection against flames.
 Mandatory foot protection	Safety footwear with antistatic and heat resistant properties	CE CAT III	EN ISO 13287:2012 EN ISO 20345:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 ºC:	0 kg/m³ (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Paste
Colour:	Pink
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	197 ºC
Vapour pressure at 20 ºC:	1457 Pa
Vapour pressure at 50 ºC:	7682,24 Pa (7,68 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	1171,6 kg/m³
Relative density at 20 ºC:	1,172
Dynamic viscosity at 20 ºC:	62,98 cP
Kinematic viscosity at 20 ºC:	53,75 cSt
Kinematic viscosity at 40 ºC:	>20,5 cSt
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *
Solubility in water at 20 ºC:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	H242 Heating may cause a fire

Flammability:

Flash Point:	111 ºC
Flammability (solid, gas):	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Autoignition temperature:	410 ºC
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
Explosive:	
Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *

9.2 Other information:

Surface tension at 20 ºC:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid direct impact	Not applicable	Avoid direct impact	Avoid direct impact	Avoid alkalines, heavy metals, reducing agents, peroxide accelerating agents

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

B- Inhalation (acute effect):

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
  IARC: Dibenzoyl peroxide (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Dibenzoyl peroxide	LD50 oral	7710 mg/kg	Rat
CAS: 94-36-0	LD50 dermal	>2000 mg/kg	
EC: 202-327-6	LC50 inhalation	>5 mg/L (4 h)	
Dimethyl Phthalate	LD50 oral	>2000 mg/kg	
CAS: 131-11-3	LD50 dermal	>2000 mg/kg	
EC: 205-011-6	LC50 inhalation	>20 mg/L (4 h)	
Ethanediol	LD50 oral	500 mg/kg (ATEi)	
CAS: 107-21-1	LD50 dermal	>2000 mg/kg	
EC: 203-473-3	LC50 inhalation	>20 mg/L (4 h)	
Siloxanes and Silicones, di-Me, reaction products with silica	LD50 oral	>2000 mg/kg	
CAS: 67762-90-7	LD50 dermal	>2000 mg/kg	
EC: Non-applicable	LC50 inhalation	Non-applicable	

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

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SECTION 12: ECOLOGICAL INFORMATION (continued)

12.1 Toxicity:

Identification	Acute toxicity		Species	Genus
Dibenzoyl peroxide	LC50	0.0602 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 94-36-0	EC50	0.11 mg/L (48 h)	Daphnia magna	Crustacean
EC: 202-327-6	EC50	0.071 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
Dimethyl Phthalate	LC50	39 mg/L (96 h)	Pimephales promelas	Fish
CAS: 131-11-3	EC50	150 mg/L (24 h)	Daphnia magna	Crustacean
EC: 205-011-6	EC50	204 mg/L (72 h)	Scenedesmus subspicatus	Algae
Ethanediol	LC50	53000 mg/L (96 h)	Pimephales promelas	Fish
CAS: 107-21-1	EC50	51000 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-473-3	EC50	24000 mg/L (168 h)	Selenastrum capricornutum	Algae

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Dibenzoyl peroxide	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 94-36-0	COD	Non-applicable	Period	10 days
EC: 202-327-6	BOD5/COD	Non-applicable	% Biodegradable	68 %
Dimethyl Phthalate	BOD5	1.12 g O2/g	Concentration	100 mg/L
CAS: 131-11-3	COD	0.74 g O2/g	Period	28 days
EC: 205-011-6	BOD5/COD	1.52	% Biodegradable	93 %
Ethanediol	BOD5	0.47 g O2/g	Concentration	100 mg/L
CAS: 107-21-1	COD	1.29 g O2/g	Period	14 days
EC: 203-473-3	BOD5/COD	0.36	% Biodegradable	90 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Dimethyl Phthalate	BCF	57
CAS: 131-11-3	Pow Log	1.6
EC: 205-011-6	Potential	Moderate
Ethanediol	BCF	10
CAS: 107-21-1	Pow Log	-1.36
EC: 203-473-3	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Dibenzoyl peroxide	Koc	6309.57	Henry	Non-applicable
CAS: 94-36-0	Conclusion	Immobile	Dry soil	Non-applicable
EC: 202-327-6	Surface tension	Non-applicable	Moist soil	Non-applicable
Dimethyl Phthalate	Koc	Non-applicable	Henry	Non-applicable
CAS: 131-11-3	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 205-011-6	Surface tension	4,044E-2 N/m (25 ºC)	Moist soil	Non-applicable
Ethanediol	Koc	0	Henry	1,327E-1 Pa·m³/mol
CAS: 107-21-1	Conclusion	Very High	Dry soil	No
EC: 203-473-3	Surface tension	4,989E-2 N/m (25 ºC)	Moist soil	No

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP13 Sensitising, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION **

Transport of dangerous goods by land:

With regard to ADR 2019 and RID 2019:



14.1	**UN number:**	UN3108
14.2	**UN proper shipping name:**	ORGANIC PEROXIDE TYPE E, SOLID (Dibenzoyl peroxide)
14.3	**Transport hazard class(es):**	5.2
	Labels:	5.2
14.4	**Packing group:**	N/A
14.5	**Environmental hazards:**	Yes
14.6	**Special precautions for user**	
	Special regulations:	122, 274
	Tunnel restriction code:	D
	Physico-Chemical properties:	see section 9
	Limited quantities:	500 g
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 39-18:



14.1	**UN number:**	UN3108
14.2	**UN proper shipping name:**	ORGANIC PEROXIDE TYPE E, SOLID (Dibenzoyl peroxide)
14.3	**Transport hazard class(es):**	5.2
	Labels:	5.2
14.4	**Packing group:**	N/A
14.5	**Environmental hazards:**	Yes
14.6	**Special precautions for user**	
	Special regulations:	122, 274
	EmS Codes:	F-J, S-R
	Physico-Chemical properties:	see section 9
	Limited quantities:	500 g
	Segregation group:	Non-applicable
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

Transport of dangerous goods by air:

*** Changes with regards to the previous version*

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SECTION 14: TRANSPORT INFORMATION ** (continued)

With regard to IATA/ICAO 2020:



14.1	**UN number:**	UN3108
14.2	**UN proper shipping name:**	ORGANIC PEROXIDE TYPE E, SOLID (Dibenzoyl peroxide)
14.3	**Transport hazard class(es):**	5.2
	Labels:	5.2
14.4	**Packing group:**	N/A
14.5	**Environmental hazards:**	Yes
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

*** Changes with regards to the previous version*

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P6b	SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES	50	200
E1	ENVIRONMENTAL HAZARDS	100	200

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

- CONTINUED ON NEXT PAGE -



SECTION 16: OTHER INFORMATION (continued)

TRANSPORT INFORMATION (SECTION 14):
- UN number
- Packing group

Texts of the legislative phrases mentioned in section 2:

H319: Causes serious eye irritation
H317: May cause an allergic skin reaction
H410: Very toxic to aquatic life with long lasting effects
H242: Heating may cause a fire

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302 - Harmful if swallowed
Aquatic Acute 1: H400 - Very toxic to aquatic life
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects
Eye Irrit. 2: H319 - Causes serious eye irritation
Org. Perox. B: H241 - Heating may cause a fire or explosion
Skin Sens. 1: H317 - May cause an allergic skin reaction
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral)

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -