Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code: **4110004300**
Product name **BLACK HIGH TEMPERATURE PAINT**

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

Intended use **High temperature spray lacquer**

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**
Supplier:

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 2020/878.
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	Extremely flammable aerosol.
	H229	Pressurised container: may burst if heated.
Eye irritation, category 2	H319	Causes serious eye irritation.
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.

Hazard pictograms:

Signal words: Danger

Hazard statements:

H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50°C / 122°F.
P501	Dispose of the product / container in accordance with local regulations.

Contains: HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
BUTAN-1-OL

2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE		
INDEX -	40 ≤ x < 42,5	Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Chronic 2 H411
EC 921-024-6		
CAS -		
REACH Reg. 01-2119475514-35-XXXX		
PROPANE		
INDEX 601-003-00-5	19,5 ≤ x < 21	Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: U
EC 200-827-9		
CAS 74-98-6		
REACH Reg. 01-2119486944-21-XXXX		
BUTANE		
INDEX 601-004-00-0	15 ≤ x < 16,5	Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: C, U
EC 203-448-7		
CAS 106-97-8		
REACH Reg. 01-2119474691-32-XXXX		
ISO-BUTANOL		
INDEX 603-108-00-1	8 ≤ x < 9	Flam. Liq. 3 H226, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336
EC 201-148-0		
CAS 78-83-1		
REACH Reg. 01-2119484609-23-XXXX		
REACTION MASS OF ETHYLBENZENE AND XYLENE		
INDEX -	8 ≤ x < 9	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1
EC 905-588-0		ATE Dermal: 1100 mg/kg, ATE Inhalation mists/powders: 1,5 mg/l
CAS -		
REACH Reg. 01-2119486136-34-XXXX		
NOT		
INDEX -	4 ≤ x < 4,5	STOT RE 1 H372, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335
EC 601-648-2		
CAS 12001-26-2		
TITANIUM DIOXIDE		
INDEX -	2 ≤ x < 2,5	Carc. 2 H351
EC 236-675-5		
CAS 13463-67-7		

REACH Reg. 01-2119489379-17-XXXX **BUTAN-1-OL**		
INDEX 603-004-00-6 EC 200-751-6 CAS 71-36-3 REACH Reg. 01-2119484630-38-XXXX	2 ≤ x < 2,5	Flam. Liq. 3 H226, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336 LD50 Oral: 790 mg/kg

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: 35,00 %

SECTION 4. First aid measures

4.1. Description of first aid measures

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

Rescuer protection

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

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

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

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

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

Immediately call a POISON CENTER/doctor.

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

Running water for skin and eye wash.

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING 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.

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 2023
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021
LTU	Lietuva	Jsakymas dėl lietuvos higienos normos hn 23:2011 „cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai“ patvirtinimo
NOR	Norge	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	TLV-ACGIH	ACGIH 2023

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				699 mg/kg bw/d				
Inhalation				608 mg/m3				2035 mg/m3
Skin				699 mg/kg bw/d				773 mg/kg bw/d

PROPANE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP		1000			
TLV	NOR	900	500			
NDS/NDSCh	POL	1800				
TLV-ACGIH			1000			

BUTANE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP		1000			Gases
VLEP	FRA	1900	800			
TLV	NOR	600	250			

NDS/NDSCh	POL	1900		3000		
WEL	GBR	1450	600	1810	750	
TLV-ACGIH					1000	

REACTION MASS OF ETHYLBENZENE AND XYLENE

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

	Effects on consumers				Effects on workers			
Route of exposure	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	65,6 mg/m3	65,6 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

ISO-BUTANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	154	50			
VLEP	FRA	150	50			
RD	LTU	10				SKIN
TLV	NOR	75	25			SKIN
NDS/NDSCh	POL	100		200		SKIN
WEL	GBR	154	50	231	75	
TLV-ACGIH		152	50			

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,4	mg/l
Normal value in marine water	0,04	mg/l
Normal value for fresh water sediment	1,56	mg/kg
Normal value for marine water sediment	0,156	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,076	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			55 mg/m3				310 mg/m3	

BUTAN-1-OL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	61	20	154	50	
VLEP	FRA			150	50	
RD	LTU	45	15	90 (C)	30 (C)	SKIN
TLV	NOR	75	25			SKIN
NDS/NDSCh	POL	50		150		SKIN
WEL	GBR			154	50	SKIN
TLV-ACGIH		61	20			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,082	mg/l
Normal value in marine water	0,008	mg/l
Normal value for fresh water sediment	0,324	mg/kg
Normal value for marine water sediment	0,032	mg/kg
Normal value of STP microorganisms	2476	mg/l
Normal value for the terrestrial compartment	0,017	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,562 mg/kg bw/d				
Inhalation			155 mg/m3	55,357 mg/m3			310 mg/m3	
Skin				3,125 mg/kg bw/d				

TITANIUM DIOXIDE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	10				
VLEP	FRA	10				
RD	LTU	5				
TLV	NOR	5				
NDS/NDSCh	POL	10				INHAL
WEL	GBR	10				INHAL
WEL	GBR	4				RESP
TLV-ACGIH		0,2				RESP

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 ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

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 ISO 16321).

RESPIRATORY PROTECTION
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. Use a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

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, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE

Types of gloves to consider for this material include: Chemical resistant gloves. In case of contact with the forearms, wear appropriate protective gloves. Nitrile, CEN standards EN 420 and EN 374 provide general requirements and lists of glove types.
Types of respirators to consider for this material include: half-face filter respirator with type A filter material, European Committee for Standardization (CEN) standards EN 136, 140 and 405 provide respiratory masks and EN 149 and 143 provide recommendations on filters.

ISO-BUTANOL

Suitable safety gloves resistant to chemicals (EN 374) even with prolonged direct contact (Recommended: protection index 6, corresponding to > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.
The manufacturer's instructions for use must be observed due to the large variety of types.
Additional note: Specifications are based on tests, literature data and information from glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature), it must be considered that the practical use of a chemical protective glove in practice can be much shorter than the breakthrough time determined through testing.

BUTAN-1-OL

Chemical resistant protective gloves (EN 374)

Materials suitable even with prolonged direct contact (Recommended: protection index 6, corresponding to > 480 minutes of permeation time according to EN 374):
butyl rubber (butyl) - coating thickness 0.7 mm
nitrile rubber (NBR) - coating thickness of 0.4 mm
Additional note: Specifications are based on tests, literature data and information from glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature), it must be considered that the practical use of a chemical protective glove in practice can be much shorter than the breakthrough time determined through testing.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	aerosol	
Colour	black	
Odour	characteristic	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	not available	
Lower explosive limit	1,5 % (v/v)	
Upper explosive limit	10,9 % (v/v)	
Flash point	not available	
Auto-ignition temperature	201 °C	
Decomposition temperature	not available	
pH	not available	
Kinematic viscosity	not available	
Solubility	partially soluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	8300 hPa	
Density and/or relative density	7 g/cm3	
Relative vapour density	not available	
Particle characteristics	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Total solids (250°C / 482°F)	139,00 %			
VOC (Directive 2010/75/EU)	85,10 %	-	620,90	g/litre
VOC (volatile carbon)	85,06 %	-	5.954,20	g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

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

BUTAN-1-OL

Attacks various types of plastic materials.

Vapors can form an explosive mixture with air.

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.

BUTANE

Vapors can form an explosive mixture with air.

ISO-BUTANOL

Reacts with strong oxidizing agents

BUTAN-1-OL

Reacts violently developing heat on contact with: aluminium,strong oxidising agents,strong reducing agents,hydrochloric acid.Forms explosive mixtures with: air.

Reacts with strong oxidizing agents.

10.4. Conditions to avoid

Avoid overheating.

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE

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

BUTANE

Avoid heat and sources of ignition.

BUTAN-1-OL

Avoid exposure to: sources of heat,naked flames.

10.5. Incompatible materials

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

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE

Oxidizing agents.

BUTANE

Strong oxidizing agents, chlorine, oxygen.

ISO-BUTANOL

Strong oxidizing agents

BUTAN-1-OL

Strong oxidizing agents.

10.6. Hazardous decomposition products

BUTANE

In case of fire or production of thermal decomposition, for example, carbon monoxide, carbon dioxide (CO2).

SECTION 11. Toxicological information

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	> 5 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE

LD50 (Dermal):	> 2920 mg/kg rabbit
LD50 (Oral):	> 5840 mg/kg rat
LC50 (Inhalation vapours):	> 25,2 mg/l/4h rat

REACTION MASS OF ETHYLBENZENE AND XYLENE

ATE (Dermal):	1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
ATE (Inhalation mists/powders):	1,5 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

BUTAN-1-OL

LD50 (Dermal):	3400 mg/kg Rabbit
LD50 (Oral):	790 mg/kg Rat
LC50 (Inhalation vapours):	8000 ppm/4h Rat

TITANIUM DIOXIDE

LD50 (Oral):	> 10000 mg/kg Rat

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
Method: Tests were not performed according to OECD and GHS guidelines.
Reliability: 2
Species: Rat (Charles River CD; male/female)
Route of exposure: Oral
Results: LD50 >8
Method: Tests were not performed according to OECD and GHS guidelines.
Reliability: 2
Species: Rat (Wistar; male/female)
Route of exposure: Inhalation (vapours)
Results: LC50 >25.2
Method: Tests were not performed according to OECD and GHS guidelines.
Reliability: 2
Species: Rat (Charles River CD; male/female)
Route of exposure: Dermal
Results: LD50 >=4

PROPANE
Method: To study the concentrations at which CNS effects occur following inhalation exposure to propane by measuring LC50 (15 min) and EC50 (CNS) (10 min) in rats.
Reliability: 2
Species: Rat (Alderley Park (SPF); male/female)
Route of exposure: Inhalation
Results: LC50 > 800 000 ppm

BUTANE
Method: Not indicated
Reliability: 2
Species: Rat (Alderley Park (SPF); male/female)
Route of exposure: Inhalation
Results: LC50: 1 443 mg/L air

REACTION MASS OF ETHYLBENZENE AND XYLENE
Method: Equivalent or similar to EU Method B.2
Reliability: 1
Species: Rat (male)

Route of exposure: Inhalation (vapours)
Results: LC50 6 700 ppm

ISO-BUTANOL
Method: OECD 401
Reliability: 1
Species: Rat (Sprague-Dawley; male/female)
Route of exposure: Oral
Results: LD50>2830 mg/kg bw
Method: OECD 402
Reliability: 1
Species: Rabbit (New Zealand White; male/female)
Route of exposure: Inhalation
Results: LD50>2000 mg/kg bw
Method: OECD 402
Reliability:1
Species: Rabbit (New Zealand White; male/female)
Route of exposure: Dermal
Results: LD50>2000 mg/kg bw

SKIN CORROSION / IRRITATION

Causes skin irritation

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
Method: OECD 404
Reliability: 2
Species: Rabbit (New Zealand White; male/female)
Route of exposure: dermal
Results: Irritant, category 2 according to OECD and GHS guidelines.

BUTAN-1-OL
Method: Not indicated
Reliability: 2
Species: Rabbit (Vienna White)
Route of exposure: Dermal
Results: Irritant, category 2

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
Method: Tests were not performed according to OECD and GHS guidelines.
Reliability: 2
Species: Rabbit (New Zealand White; male/female)
Route of exposure: Ocular
Results: Non-irritating

ISO-BUTANOL
Method: OECD 405
Reliability: 1
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Corrosive

BUTAN-1-OL
Method: OECD 405
Reliability: 1
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Positive, category 1

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

ISO-BUTANOL
Method: QSAR
Reliability: 1
Species: Not indicated
Route of exposure: Dermal
Results: Not classified

Skin sensitization

TITANIUM DIOXIDE
Method: Equivalent or similar to OECD Guideline 429
Reliability: 1
Species: Mouse (CBA/JHsd; female)
Route of exposure: Dermal
Results: Not sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
Method: Equivalent or similar to OECD 471 - in vitro test
Reliability: 1
Species: S. typhimurium, E. coli
Results: Negative and without metabolic activation.
Bibliographic reference: Brooks, T.M. et al. The genetic toxicology of some hydrocarbon and oxygenated solvents (1988).

PROPANE
Method: OECD 471-in vitro test
Reliability: 1
Species: Histidine Salmonella
Results: Negative with or without metabolic activation
Method: OECD 474-in vivo test
Reliability: 1
Species: Rat (Sprague-Dawley CD; male/female)
Route of exposure: Inhalation (gas)
Results: Negative

BUTANE
Method: OECD 471-in vitro test
Reliability: 1
Species: Salmonella strains, S. typhimurium
Results: Negative without metabolic activation
Method: OECD 474-in vivo test
Reliability: 1
Species: Rat (Sprague-Dawley CD; male/female)
Route of exposure: Inhalation (gas)
Results: Negative

REACTION MASS OF ETHYLBENZENE AND XYLENE
Method: Equivalent or similar OECD Guideline 478-in vivo test
Reliability: 2
Species: Mouse (Swiss Webster; male/female)
Route of exposure: Subcutaneous
Results: Negative

ISO-BUTANOL
Method: Not indicated - in vitro test
Reliability: 2
Species: Chinese hamster
Results: Negative with and without metabolic activation
Bibliographic reference: Evaluation of the genotoxic potential of some microbial volatile organic compounds (MVOC) with the comet assay, the micronucleus assay and the HPRT gene mutation assay, Kreja L, Seidel H-J (2002)
Method: OECD 474-in vivo test
Reliability: 1
Species: Mouse (NMRI; male/female)
Route of exposure: Oral
Results: Negative

BUTAN-1-OL
Method: OECD 476-in vitro test
Reliability: 1
Species: Chinese hamster
Results: Negative with or without metabolic activation
Method: OECD 474-in vivo test
Reliability: 1
Species: Mouse (NMRI; male/female)
Route of exposure: Oral
Results: Negative

TITANIUM DIOXIDE
Method: EPA OPPTS 870.5375 - In vitro Mammalian Chromosome Aberration Test
Reliability: 2
Species: Chinese hamster
Results: Negative

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REACTION MASS OF ETHYLBENZENE AND XYLENE
Method: Equivalent or similar to EU Method B.32
Reliability: 2
Species: Rat (F344/N;male/female)
Route of exposure: Oral
Results: Negative

TITANIUM DIOXIDE
Reliability: 2
Species: Mouse (B6C3F1; male/female)
Route of exposure: Oral
Results: NOEL 50000 ppm

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
Method: Equivalent or similar to OECD 416
Reliability: 1
Species: Rat (Sprague-Dawley; male/female)
Route of exposure: Inhalation (vapours)
Results: NOAEL (reproduction)=9000 ppm

BUTANE
Method: OECD 413
Reliability: 1
Species: Rat (Sprague-Dawley CD; male/female)

Route of exposure: Inhalation
Results: NOAEC 10000 ppm

Adverse effects on sexual function and fertility

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

ISO-BUTANOL
Method: EPA OPPTS 870.3800
Reliability: 1
Species: Rat (Sprague-Dawley; male/female)
Route of exposure: Inhalation (vapours)
Results: Negative, NOAEL (fertility)>=7.5 mg/L air

Adverse effects on development of the offspring

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

REACTION MASS OF ETHYLBENZENE AND XYLENE
Method: Equivalent or similar OECD Guideline 414
Reliability: 2
Species: Rat (Sprague-Dawley)
Route of exposure: Inhalation (vapours)
Results: NOAEC 500 ppm

ISO-BUTANOL
Method: OECD 414
Reliability: 1
Species: Rat (Wistar)
Route of exposure: Inhalation (vapours)
Results: Negative, NOAEL (development)=10 mg/L air

TITANIUM DIOXIDE
Method: OECD Guideline 414
Reliability: 1
Species: Mouse (Wistar)
Route of exposure: Oral
Results: NOAEL 1 000 mg/kg bw/day

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
Based on available data and expert judgment, the substance is classified in the target organ toxicity class for single exposure.

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

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

REACTION MASS OF ETHYLBENZENE AND XYLENE
Based on available data and expert judgment, the substance is not classified in the single exposure target organ toxicity class.

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

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

BUTAN-1-OL
Based on available data and expert judgment, the substance is classified in the single exposure target organ toxicity class.

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

Target organs

ISO-BUTANOL
Respiratory tract

BUTAN-1-OL
Respiratory tract, skin, eyes.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
Method: Not indicated
Reliability: 1
Species: Rat (WAG/RijCrlBR; male)
Route of exposure: Inhalation (vapours)
Results: Positive, NOAEC=14000 mg/m3 air

PROPANE
Method: OECD 422
Reliability: 1
Species: Rat (Sprague-Dawley; male/female)
Route of exposure: Inhalation (gas)
Results: NOAEC 16 000 ppm

BUTANE
Method: OECD 413
Reliability: 1
Species: Rat (Sprague-Dawley; male/female)
Route of exposure: Inhalation (gas)
Results: NOAEC=10000 ppm

REACTION MASS OF ETHYLBENZENE AND XYLENE
Method: Equivalent or similar to EU Method B.32
Reliability: 2
Species: Rat (F344/N;male/female)
Route of exposure: Oral
Results: NOAEL 250 mg/kg bw/day

ISO-BUTANOL
Method: OECD 408
Reliability: 1
Species: Rat (Wistar; male/female)

Route of exposure: Oral
Results: Negative, NOAEL>1450 mg/kg bw/day
Method: EPA OPPTS 870.3800
Reliability: 1
Species: Rat (Sprague-Dawley; male/female)
Route of exposure: Inhalation (vapours)
Results: Negative, NOAEL=7.5 mg/L air

NOT
Based on available data and expert judgment, the substance is not classified in the target organ toxicity class for prolonged or repeated exposure.

BUTAN-1-OL
Method: OECD SIDS n-Butyl Alcohol
Reliability: 1
Species: Rat (Sprague-Dawley; male/female)
Route of exposure: Oral
Results: NOEL 125 mg/kg bw/day
Method: EPA OTS 798.2450
Reliability: 1
Species: Rat (Sprague-Dawley)
Route of exposure: Inhalation (vapours)
Results: NOEL 500 ppm

TITANIUM DIOXIDE
Based on available data and expert judgment, the substance is not classified in the target organ toxicity class for prolonged or repeated exposure.

Target organs

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
Central nervous system

Route of exposure

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
Inhalation

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
Dryness

11.2. Information on other hazards

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

SECTION 12. Ecological information

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

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE	
LC50 - for Fish	11,4 mg/l/96h fish
EC50 - for Crustacea	3 mg/l/48h daphnia magna
EC50 - for Algae / Aquatic Plants	> 30 mg/l/72h algae

REACTION MASS OF ETHYLBENZENE AND XYLENE

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
Chronic NOEC for Algae / Aquatic Plants	0,44 mg/l

12.2. Persistence and degradability

HYDROCARBONS, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
Easily degradable in water, 98% in 28 days (OECD 301)
BUTANE
Rapidly degradable in water.
ISO-BUTANOL
Easily degradable in water, 70-80% in 28 days.
BUTAN-1-OL
Rapidly biodegradable, 92% in 15 days.

BUTANE

Solubility in water	0,1 - 100 mg/l

Rapidly degradable

TITANIUM DIOXIDE

Solubility in water	< 0,001 mg/l

Degradability: information not available

ISO-BUTANOL

Solubility in water	1000 - 10000 mg/l

Rapidly degradable

PROPANE

Solubility in water	0,1 - 100 mg/l

Rapidly degradable

BUTAN-1-OL

Solubility in water	1000 - 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

BUTANE

Partition coefficient: n-octanol/water	1,09

ISO-BUTANOL

Partition coefficient: n-octanol/water	1

PROPANE

Partition coefficient: n-octanol/water	1,09

BUTAN-1-OL

Partition coefficient: n-octanol/water	1
BCF	3,16

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an 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, C6-C7, N-ALKANES, ISOALKANES, CYCLIC, <5% N-HEXANE
The product is suitable for combustion in a closed controlled burner for value or disposal of the fuel by supervised incineration at very high temperatures to prevent the formation of undesirable combustion products.
Empty drums should be completely drained and stored safely until properly reprocessed or disposed of. Empty containers must be recycled, recovered or disposed of through a suitably qualified or authorized contractor and in accordance with government regulations. DO NOT PRESSURIZE, CUT, WELD, BRAZE, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

BUTANE
No waste key number according to the European List of Types of Waste can be assigned to this product, since this classification is based on the use (not yet determined) to which the product is intended by the consumer.
The waste key number must be determined according to the European List of Types of Waste (EU List of Types of Waste Decision 2000/532 / EC) in cooperation with the disposal company / producing company / authority official.

ISO-BUTANOL
They must be disposed of or incinerated in accordance with local regulations.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: UN 1950

14.2. UN proper shipping name

ADR / RID:	AEROSOLS, FLAMMABLE
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:	Environmentally Hazardous
IMDG:	Marine Pollutant
IATA:	NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: --	Limited Quantities: 1 L	Tunnel restriction code: (D)
	Special provision: 190, 327, 344, 625		
IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 150 Kg	Packaging instructions: 203
	Passengers:	Maximum quantity: 75 Kg	Packaging instructions: 203
	Special provision:	A145, A167, A802	

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: P3a-E2

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

Product
Point 40

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that 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
Press. Gas (Liq.)	Liquefied gas
Carc. 2	Carcinogenicity, category 2
Acute Tox. 4	Acute toxicity, category 4
STOT RE 1	Specific target organ toxicity - repeated exposure, category 1
Asp. Tox. 1	Aspiration hazard, category 1
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
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 explode if heated.
H351	Suspected of causing cancer.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization

- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) 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
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
23. Delegated Regulation (UE) 2023/707
24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
24. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
- 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.
CALCULATION METHODS FOR CLASSIFICATION

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

Changes to previous review:
The following sections were modified:
02 / 03 / 04 / 08 / 09 / 11 / 12 / 14 / 15 / 16.