

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: 411 00 04300-2628
Product name: HIGH TEMPERATURE PAINT BLACK

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

Intended use: Spray lacquer for high temperatures

1.3. Details of the supplier of the safety data sheet

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

Tel. +39 0587 609433

Fax +39 0587 607145

e-mail address of the competent person

responsible for the Safety Data Sheet: moreno.meini@meccanocar.it

1.4. Emergency telephone number

For urgent inquiries refer to: National Poisons Information Service: +44 121 507 4123

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Aerosol, category 1	H222 H229	Extremely flammable aerosol. Pressurised container: may burst if heated.
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.

HIGH TEMPERATURE PAINT BLACK

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! In case of vaporization dangerous respirable droplets may form. Do not breathe vapor or mist.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
P211	Do not spray on an open flame or other ignition source.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P501	Dispose of contents / container in accordance with local regulations.

Contains:	HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE BUTANOL
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2.3. Other hazards

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE		
CAS -	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		
INDEX -		
Reg. no. 01-2119475514-35-XXXX		

HIGH TEMPERATURE PAINT BLACK

PROPANE

CAS 74-98-6

 $19,5 \leq x < 21$

Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: U

EC 200-827-9

INDEX 601-003-00-5

Reg. no. 01-2119486944-21-XXXX

BUTANE

CAS 106-97-8

 $15 \leq x < 16,5$

Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: C U

EC 203-448-7

INDEX 601-004-00-0

Reg. no. 01-2119474691-32-XXXX

ISOBUTYL ALCOHOL

CAS 78-83-1

 $8 \leq x < 9$

Flam. Liq. 3 H226, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336

EC 201-148-0

INDEX 603-108-00-1

Reg. no. 01-2119484609-23-XXXX

ETHYLBENZENE AND XYLENE**REACTION MASS**

CAS -

 $8 \leq x < 9$

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

INDEX -

Reg. no. 01-2119486136-34-XXXX

MICA

CAS 12001-26-2

 $4 \leq x < 4,5$

STOT RE 1 H372, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335

EC 601-648-2

INDEX -

TITANIUM DIOXIDE

CAS 13463-67-7

 $2 \leq x < 2,5$

Carc. 2 H351

EC 236-675-5

INDEX -

Reg. no. 01-2119489379-17-XXXX

BUTANOL

CAS 71-36-3

 $2 \leq x < 2,5$

Flam. Liq. 3 H226, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336

EC 200-751-6

INDEX 603-004-00-6

Reg. no. 01-2119484630-38-XXXX

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

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

Percentage of propellants: 35,00 %

SECTION 4. First aid measures

HIGH TEMPERATURE PAINT BLACK**4.1. Description of first aid measures**

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

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

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

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

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

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

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

Information not available

SECTION 5. Firefighting measures**5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

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

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

5.3. Advice for firefighters**GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

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

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

HIGH TEMPERATURE PAINT BLACK

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 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition, published 2018)
NOR	Norge	Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5
	TLV-ACGIH	ACGIH 2019

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				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	
VLA	ESP		1000	
TLV	NOR	900	500	

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					
WEL	GBR	1450	600	1810	750			
TLV	NOR	600	250					
TLV-ACGIH					1000			
ETHYLBENZENE AND XYLENE REACTION MASS								
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
ISOBUTYL ALCOHOL								
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					
WEL	GBR	154	50	231	75			
TLV	NOR	75	25			SKIN		
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	

BUTANOL								
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			
WEL	GBR			154	50	SKIN		
TLV	NOR	75	25			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						
WEL	GBR	4				RESP		
WEL	GBR	10				INHAL		
TLV	NOR	5						
TLV-ACGIH		10						

Legend:

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

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

8.2. Exposure controls

HIGH TEMPERATURE PAINT BLACK

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.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

None required.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

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

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

ENVIRONMENTAL EXPOSURE CONTROLS

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

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

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

The types of gloves to consider for this material include: chemical resistant gloves. In case of contact with the forearms, wear suitable protective gloves. Nitrile, standards CEN EN 420 and EN 374 provide general requirements and lists of types of gloves.

The types of respirators to be considered for this material include: half-face filter respirator with type A filter material, standards EN 136, 140 and 405 of the European Committee for Standardization (CEN) provide respiratory masks and EN 149 and 143 provide recommendations on the filters.

ISOBUTYL ALCOHOL

Suitable safety gloves resistant to chemicals (EN 374) also with prolonged direct contact (Recommended: protection index 6, corresponding to > 480 minutes of breakthrough time according to EN 374): Eg nitrile rubber (0.4 mm), chloroprene rubber (0.5mm), butyl rubber (0.7mm) etc.

The manufacturer's instructions for use must be observed due to the wide variety of types.

Additional note: specifications are based on tests, literature data and information from glove manufacturers or derive from similar substances by analogy. Due to many conditions (eg temperature), it should be considered that the practical use of a chemical protective glove in practice can be much shorter than the breakthrough time determined through testing.

BUTANOL

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged direct contact (Recommended: protection index 6, corresponding to > 480 minutes of permeation time according to EN 374):

HIGH TEMPERATURE PAINT BLACK

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 derive from similar substances by analogy. Due to many conditions (eg temperature), it should 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

Appearance	aerosol
Colour	black
Odour	characteristic
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	1,5 % (V/V)
Upper inflammability limit	10,9 % (V/V)
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	8300 hPa
Vapour density	Not available
Relative density	Not available
Solubility	partially soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

Tenore del solvente:	
Solventi organici:	85,1%
VOC (CE)	---
	578,9 g/l
Contenuto solido:	26,4%

SECTION 10. Stability and reactivity

10.1. Reactivity

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

HIGH TEMPERATURE PAINT BLACK

BUTANOL

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.

ISOBUTYL ALCOHOL

Reacts with strong oxidizing agents

BUTANOL

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-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

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

BUTANE

Avoid heat and sources of ignition.

BUTANOL

Avoid exposure to: sources of heat, naked flames.

10.5. Incompatible materials

HIGH TEMPERATURE PAINT BLACK

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

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Oxidizing agents.

BUTANE

Strong oxidizing agents, chlorine, oxygen.

ISOBUTYL ALCOHOL

Strong oxidizing agents

BUTANOL

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 toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

HIGH TEMPERATURE PAINT BLACK

LC50 (Inhalation) of the mixture:

> 20 mg/l

LD50 (Oral) of the mixture:

>2000 mg/kg

LD50 (Dermal) of the mixture:

>2000 mg/kg

TITANIUM DIOXIDE

LD50 (Oral) > 10000 mg/kg Rat

BUTANOL

LD50 (Oral) 790 mg/kg Rat

LD50 (Dermal) 3400 mg/kg Rabbit

LC50 (Inhalation) 8000 ppm/4h Rat

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

LD50 (Oral) > 5840 mg/kg rat

LD50 (Dermal) > 2920 mg/kg rabbit

LC50 (Inhalation) > 25,2 mg/l/4h rat

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Method: The tests were not performed according to the OECD and GHS guidelines.

Reliability: 2

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

Route of exposure: Oral

Results: LD50> 8

Method: The tests were not performed according to the OECD and GHS guidelines.

Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Inhalation (vapors)

Results: LC50> 25.2

Method: The tests were not performed according to the 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 the effects of the CNS occur following exposure by inhalation 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

HIGH TEMPERATURE PAINT BLACK

BUTANE

Method: Not indicated

Reliability: 2

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

Route of exposure: Inhalation

Results: LC50: 1 443 mg / L air

ETHYLBENZENE AND XYLENE REACTION MASS

Method: Equivalent or similar to EU Method B.2

Reliability: 1

Species: Rat (male)

Route of exposure: Inhalation (vapors)

Results: LC50 6 700 ppm

ISOBUTYL ALCOHOL

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-ALCANS, ISOALKANS, CYCLES, <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.

BUTANOL

Method: Not indicated

Reliability: 2

Species: Rabbit (Vienna White)

Route of exposure: Dermal

Results: Irritating, category 2

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

HIGH TEMPERATURE PAINT BLACK

Method: The tests were not performed following the OECD and GHS guidelines.

Reliability: 2

Species: Rabbit (New Zealand White; male / female)

Route of exposure: Ocular

Results: Not irritating

ISOBUTYL ALCOHOL

Method: OECD 405

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Corrosive

BUTANOL

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

ISOBUTYL ALCOHOL

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-ALCANS, ISOALKANS, CYCLES, <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

HIGH TEMPERATURE PAINT BLACK

Reliability: 1

Species: Histidine Salmonella

Results: Negative with or without metabolic activation

Method: OECD 474-test in vivo

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-test in vivo

Reliability: 1

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

Route of exposure: Inhalation (gas)

Results: Negative

ETHYLBENZENE AND XYLENE REACTION MASS

Method: Equivalent or similar OECD Guideline 478-test in vivo

Reliability: 2

Species: Mouse (Swiss Webster; male / female)

Route of exposure: Subcutaneous

Results: Negative

ISOBUTYL ALCOHOL

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-test in vivo

Reliability: 1

Species: Mouse (NMRI; male / female)

Route of exposure: Oral

Results: Negative

BUTANOL

Method: OECD 476 in vitro test

Reliability: 1

Species: Chinese hamster

Results: Negative with or without metabolic activation

Method: OECD 474-test in vivo

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

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CARCINOGENICITY

Does not meet the classification criteria for this hazard class

ETHYLBENZENE AND XYLENE REACTION MASS

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-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Method: Equivalent or similar to OECD 416

Reliability: 1

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

Route of exposure: Inhalation (vapors)

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

ISOBUTYL ALCOHOL

Method: EPA OPPTS 870.3800

Reliability: 1

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

Route of exposure: Inhalation (vapors)

Results: Negative, NOAEL (fertility)> = 7.5 mg / L air

Adverse effects on development of the offspring

PROPANE

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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

ETHYLBENZENE AND XYLENE REACTION MASS

Method: Equivalent or similar OECD Guideline 414

Reliability: 2

Species: Rat (Sprague-Dawley)

Route of exposure: Inhalation (vapors)

Results: NOAEC 500 ppm

ISOBUTYL ALCOHOL

Method: OECD 414

Reliability: 1

Species: Rat (Wistar)

Route of exposure: Inhalation (vapors)

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-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

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

PROPANE

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

BUTANE

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

ETHYLBENZENE AND XYLENE REACTION MASS

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

ISOBUTYL ALCOHOL

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

MICA

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

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TITANIUM DIOXIDE

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

Target organ
ISOBUTYL ALCOHOL

Respiratory tract

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Method: Not indicated
Reliability: 1
Species: Rat (WAG / RjxCrlBR; male)
Route of exposure: Inhalation (vapors)
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

ETHYLBENZENE AND XYLENE REACTION MASS

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

ISOBUTYL ALCOHOL

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 (vapors)
Results: Negative, NOAEL = 7.5 mg / L air

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MICA

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

BUTANOL

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 (vapors)

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 organ

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Central nervous system

Route of exposure

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Inhalation

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Dryness

SECTION 12. Ecological information

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

12.1. Toxicity

HYDROCARBONS, C6-C7, N-ALCANS,
ISOALKANS, CYCLES, <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

ETHYLBENZENE AND XYLENE REACTION
MASS

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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-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Easily degradable in water, 98% in 28 days (OECD 301)

BUTANE

Quickly degradable in water.

ISOBUTYL ALCOHOL

Easily degradable in water, 70-80% in 28 days.

BUTANOL

Quickly 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

ISOBUTYL ALCOHOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

PROPANE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

BUTANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

BUTANE

Partition coefficient: n-octanol/water 1,09

ISOBUTYL ALCOHOL

Partition coefficient: n-octanol/water 1

PROPANE

Partition coefficient: n-octanol/water 1,09

BUTANOL

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

12.4. Mobility in soil

ISOBUTYL ALCOHOL
Partition coefficient: soil/water 0,31

BUTANOL
Partition coefficient: soil/water 0,388

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations**13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

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

Empty drums must be completely drained and safely stored until they are properly reconditioned or disposed of. Empty containers must be recycled, recovered or disposed of through an appropriately 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 IGNITION SOURCES. MAY EXPLODE AND CAUSE INJURY OR DEATH.

BUTANE

No waste key number according to the European list of waste types can be assigned to this product, since this classification is based on the use (not yet determined) for which the product is intended for the consumer.

The key number for the waste must be determined according to the European waste type list (decision on the EU waste type list 2000/532 / EC) in collaboration with the disposal company / producer / authority Official.

ISOBUTYL ALCOHOL

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

SECTION 14. Transport information**14.1. UN number**

ADR / RID, IMDG, 1950

IATA:

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

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



14.4. Packing group

ADR / RID, IMDG, IATA: -

14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for user

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

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

Information not relevant

SECTION 15. Regulatory information

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

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

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

Product

Point 40

Substances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

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

SECTION 16. Other information

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

Flam. Gas 1A	Flammable gas, category 1A
Aerosol 1	Aerosol, category 1
Aerosol 3	Aerosol, category 3
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Press. Gas (Liq.)	Liquefied gas
Carc. 2	Carcinogenicity, category 2

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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 burst 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.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value

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- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
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 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
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- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

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

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

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

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

Changes to previous review:

The following sections were modified:

02 / 03 / 08 / 10 / 11 / 12 / 13 / 15 / 16.