Safety data sheet

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

1.1. Product identifier.

Code:	**C0031**
Product name.	**TINTE RAL IN BARATTOLO**
Chemical name and synonym.	**SMALTO ALCHIDICO**

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

Intended use. **TINTE RAL ORIGINALI EUROPEE IN BARATTOLO.**

1.3. Details of the supplier of the safety data sheet.

Name.	**Talken Color Srl**
Full address.	**via Don Milani 15**
District and Country.	**20025 Legnano (Mi)** **Italia**
	Tel. 0331/579100
	Fax. 0331/579372

1.4. Emergency telephone number.

For urgent inquiries refer to. **CENTRO ANTIVELENI dl Milano-Niguarda Tel 0266101029**

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 EC Regulation 1907/2006 and subsequent amendments. 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:

Flammable liquid, category 2	H225	Highly flammable liquid and vapour.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.

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:

H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.

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.
P501	Dispose of contents in different containers for steel

Contains: BUTANOL
N-BUTYL ACETATE
PROPAN-2-OL
TOLUENE

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.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification.	**Conc. %.**	**Classification 1272/2008 (CLP).**
4-HYDROXY-4-METHYLPENTAN-2-ONE		
CAS. 123-42-2	10 - 30	Flam. Liq. 3 H226, Eye Irrit. 2 H319
EC. 204-626-7		
INDEX. 603-016-00-1		
BUTANOL		
CAS. 71-36-3	9 - 10	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		
N-BUTYL ACETATE		
CAS. 123-86-4	5 - 9	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
EC. 204-658-1		

INDEX. 607-025-00-1

Reg. no. 01-2119485493-29

XYLENE (MIXTURE OF ISOMERS)

CAS. 1330-20-7	5 - 9	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Irrit. 2 H315, Note C

EC. 215-535-7

INDEX. 601-022-00-9

PROPAN-2-OL

CAS. 67-63-0	1 - 5	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336

EC. 200-661-7

INDEX. 603-117-00-0

Reg. no. 01-2119457558-25

ETHYLBENZENE

CAS. 100-41-4	1 - 5	Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373

EC. 202-849-4

INDEX. 601-023-00-4

2-BUTOXYETHANOL

CAS. 111-76-2	1 - 5	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315

EC. 203-905-0

INDEX. 603-014-00-0

2-METHOXY-1-METHYLETHYL ACETATE

CAS. 108-65-6	0 - 0,5	Flam. Liq. 3 H226

EC. 203-603-9

INDEX. 607-195-00-7

AMMIDE DI AC. GRASSI N,N-BIS (IDROSSIETILE)

CAS. 68603-42-9	0 - 0,5	Eye Irrit. 2 H319, Skin Irrit. 2 H315

EC. -

INDEX. -

TOLUENE

CAS. 108-88-3	0 - 0,5	Flam. Liq. 2 H225, Repr. 2 H361d, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H336

EC. 203-625-9

INDEX. 601-021-00-3

Note: Upper limit is not included into the range.

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

SECTION 4. First aid measures.

4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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
Extinguishing substances are: carbon dioxide and chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.
UNSUITABLE EXTINGUISHING EQUIPMENT
Do not use jets of water.
Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
If large quantities of the product are involved in a fire, they can make it considerably worse. Do not breathe combustion products.

5.3. Advice for firefighters.

GENERAL INFORMATION
In the case of fire, use jets of water to cool the containers to prevent the risk of explosions (product decomposition and excess pressure) and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Remove all containers containing the product from the fire, if it is safe to do so.
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.

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
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.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised.

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities.

Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition.

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

CHE	Suisse / Schweiz	Valeurs limites d`exposition aux postes de travail 2012. / Grenzwerte am Arbeitsplatz

ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
GRB	United Kingdom	EH40/2005 Workplace exposure limits
IRL	Éire	Code of Practice Chemical Agent Regulations 2011
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2016

4-HYDROXY-4-METHYLPENTAN-2-ONE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	241	50			
WEL	GRB	241	50	362	75	
OEL	IRL	240	50	360	75	
TLV-ACGIH		238	50			

BUTANOL

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VEL	CHE	150	50	150	50	
MAK	CHE	150	50	150	50	
VLA	ESP	61	20	154	50	SKIN.
WEL	GRB			154	50	SKIN.
OEL	IRL		20			SKIN.
TLV-ACGIH		61	20			

N-BUTYL ACETATE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VEL	CHE	480	100	960	200	
MAK	CHE	480	100	960	200	
VLA	ESP	724	150	965	200	
WEL	GRB	724	150	966	200	
OEL	IRL	710	150	950	200	
TLV-ACGIH		713	150	950	200	

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	221	50	442	100	SKIN.
WEL	GRB	220	50	441	100	
OEL	IRL	221	50	442	100	SKIN.
TLV	ITA	221	50	442	100	SKIN.
OEL	EU	221	50	442	100	SKIN.

TLV-ACGIH		434	100	651	150	

PROPAN-2-OL

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	500	200	1000	400	
WEL	GRB	999	400	1250	500	
OEL	IRL		200		400	SKIN.
TLV-ACGIH		492	200	983	400	

ETHYLBENZENE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	441	100	884	200	SKIN.
WEL	GRB	441	100	552	125	SKIN.
OEL	IRL	442	100	884	200	SKIN.
TLV	ITA	442	100	884	200	SKIN.
OEL	EU	442	100	884	200	SKIN.
TLV-ACGIH		87	20			

2-BUTOXYETHANOL

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VEL	CHE	49	10	98	20	SKIN.
MAK	CHE	49	10	98	20	SKIN.
VLA	ESP	98	20	245	50	SKIN.
WEL	GRB	123	25	246	50	SKIN.
OEL	IRL	98	20	246	50	SKIN.
TLV	ITA	98	20	246	50	SKIN.
OEL	EU	98	20	246	50	SKIN.
TLV-ACGIH		97	20			

2-METHOXY-1-METHYLETHYL ACETATE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	275	50	550	100	SKIN.
WEL	GRB	274	50	548	100	
OEL	IRL	275	50	550	100	SKIN.
TLV	ITA	275	50	550	100	SKIN.
OEL	EU	275	50	550	100	SKIN.

TOLUENE

Threshold Limit Value.

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

VLA	ESP	192	50	384	100	SKIN.
WEL	GRB	191	50	384	100	SKIN.
OEL	IRL	192	50	384	100	SKIN.
TLV	ITA	192	50			SKIN.
OEL	EU	192	50	384	100	SKIN.
TLV-ACGIH		75,4	20			

Legend:

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

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. 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
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION
Wear a hood visor or protective visor combined with airtight 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, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
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.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS.

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

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance	liquid
Colour	as showed in color folder
Odour	characteristic of solvent
Odour threshold.	Not available.

pH.	Not available.
Melting point / freezing point.	Not available.
Initial boiling point.	> 35 °C.
Boiling range.	Not available.
Flash point.	< 23 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	1,083 Kg/l
Solubility	solubile in acetone e/o diluente nitro
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.

Solid content.	49,34 %
VOC (Directive 2010/75/EC) :	50,48 % - 546,80 g/litre.
VOC (volatile carbon) :	Not available.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

The product can decompose and/or react violently.

1-METHOXY-2-PROPANOL ACETATE: stable but with the air it may slowly develop peroxides that explode with an increase in temperature.
TOLUENE: breaks down in sunlight.
BUTANOL: attacks various types of plastic.
2-BUTOXYETHANOL: decomposes in the presence of heat.
4-HYDROXY-4-METHYLPENTAN-2-ONE: decomposes at tempratures above 90°C/194°F.

10.2. Chemical stability.

See previous paragraph.

10.3. Possibility of hazardous reactions.

See paragraph 10.1.

XYLENE (MIXTURE OF ISOMERS): stable, but may develop violent reactions in the presence of strong oxidising agents such as sulphuric and nitric acids and perchlorates. May form explosive mixtures with the air.
1-METHOXY-2-PROPANOL ACETATE: may react violently with oxidising agents and strong acids and alkaline metals.
TOLUENE: risk of explosion on contact with fuming sulphuric acid, nitric acid, silver perchlorates, nitrogen dioxide, non-metal halogenides, acetic acid, organic nitrocompounds. Can form explosive mixtures with the air. May react dangerously with: strong oxidising agents, strong acids, sulphur (in the presence of heat).
ETHYLBENZENE: reacts violently with strong oxidising agents and attacks various types of plastics. Can form explosive mixtures with the air.
BUTANOL: reacts violently developing heat with: aluminium, strong oxidising agents, strong reducing agents, hydrochloric acid. Forms explosive mixtures

with the air.
2-BUTOXYETHANOL: can react dangerously with: aluminium, oxidising agents. Forms peroxide with air.
4-HYDROXY-4-METHYLPENTAN-2-ONE: risk of explosion on contact with the air and sources of heat. Can react dangerously with: alkaline metals, amines, oxidising agents, acids.

10.4. Conditions to avoid.

As the product decomposes even at ambient temperature, it must be stored and used at a controlled temperature. Avoid violent blows.

1-METHOXY-2-PROPANOL ACETATE: store in an inert atmosphere, sheletered from moisture because it hydrolises easily.
BUTANOL: avoid exposure to sources of heat and naked flames.
2-BUTOXYETHANOL: avoid exposure to sources of heat and naked flames.
4-HYDROXY-4-METHYLPENTAN-2-ONE: avoid exposure to light, sources of heat and naked flames.

10.5. Incompatible materials.

1-METHOXY-2-PROPANOL ACETATE: oxidising agents, strong acids and alkaline metals.

10.6. Hazardous decomposition products.

ETHYLBENZENE: methane, styrene, hydrogen, ethane.
2-BUTOXYETHANOL: hydrogen.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.
This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.
Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.
This product contains highly volatile substances, which may cause serious depression of the central nervous system (CNS) and have negative effects, such as drowsiness, dizziness, slow reflexes, narcosis.

XYLENE (MIXTURE OF ISOMERS): has a toxic effect on the CNS (encephalopathies). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.
1-METHOXY-2-PROPANOL ACETATE: the main way of entry is the skin, whereas the respiratory way is less important owing to the low vapour tension of the product. Concentrations above 100 ppm cause eye irritation, nose and oropharynx. At 1000 ppm disturbance in the equilibrium and severe eye irritation is observed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and ocular irritation on direct contact. No chronic effects have been reported in man.
TOLUENE: it has a toxic effect on the central and peripheral nervous system (with encephalopathies and polyneuritis). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.
ETHYLBENZENE: like the benzene homologues, may exert an effect on the CNS with depression, narcosis, often preceded by dizziness and accompanied by headache. It is irritating to the skin, conjunctivae and respiratory apparatus.
4-HYDROXY-4-METHYLPENTAN-2-ONE: its acute toxicity is manifested by eye irritation, nose and throat in man at 100 ppm (476 mg/kg) and by pulmonary disorders at 400 ppm. No chronic effects have been reported in man.

XYLENE (MIXTURE OF ISOMERS)
LD50 (Oral).3523 mg/kg Rat
LD50 (Dermal).4350 mg/kg Rabbit
LC50 (Inhalation).26 mg/l/4h Rat

2-METHOXY-1-METHYLETHYL ACETATE
LD50 (Oral).8530 mg/kg Rat
LD50 (Dermal).> 5000 mg/kg Rat

TOLUENE
LD50 (Oral).5580 mg/kg Rat
LD50 (Dermal).12124 mg/kg Rabbit
LC50 (Inhalation).28,1 mg/l/4h Rat

ETHYLBENZENE
LD50 (Oral).3500 mg/kg Rat
LD50 (Dermal).15354 mg/kg Rabbit
LC50 (Inhalation).17,2 mg/l/4h Rat

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

2-BUTOXYETHANOL
LD50 (Oral).615 mg/kg Rat
LD50 (Dermal).405 mg/kg Rabbit
LC50 (Inhalation).2,2 mg/l/4h Rat

4-HYDROXY-4-METHYLPENTAN-2-ONE
LD50 (Oral).4000 mg/kg Rat

PROPAN-2-OL
LD50 (Oral).4710 mg/kg Rat
LD50 (Dermal).12800 mg/kg Rat
LC50 (Inhalation).72,6 mg/l/4h Rat

N-BUTYL ACETATE
LD50 (Oral).> 6400 mg/kg Rat
LD50 (Dermal).> 5000 mg/kg Rabbit
LC50 (Inhalation).21,1 mg/l/4h Rat

SECTION 12. Ecological information.

12.1. Toxicity.
Information not available.

12.2. Persistence and degradability.

XYLENE (MIXTURE OF ISOMERS)
Solubility in water. mg/l 100 - 1000

Biodegradability: Information not available.

2-METHOXY-1-METHYLETHYL ACETATE
Solubility in water. > 10000 mg/l

Rapidly biodegradable.

TOLUENE

Solubility in water.	mg/l 100 - 1000

Rapidly biodegradable.

ETHYLBENZENE

Solubility in water.	mg/l 1000 - 10000

Rapidly biodegradable.

BUTANOL

Solubility in water.	mg/l 1000 - 10000

Rapidly biodegradable.

2-BUTOXYETHANOL

Solubility in water.	mg/l 1000 - 10000

Rapidly biodegradable.

4-HYDROXY-4-METHYLPENTAN-2-ONE

Solubility in water.	mg/l 1000 - 10000

Rapidly biodegradable.

PROPAN-2-OL

Rapidly biodegradable.

N-BUTYL ACETATE

Solubility in water.	mg/l 1000 - 10000

12.3. Bioaccumulative potential.

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: n-octanol/water.	3,12
BCF.	25,9

2-METHOXY-1-METHYLETHYL ACETATE

Partition coefficient: n-octanol/water.	1,2

TOLUENE

Partition coefficient: n-octanol/water.	2,73
BCF.	90

ETHYLBENZENE	
Partition coefficient: n-octanol/water.	3,6
BUTANOL	
Partition coefficient: n-octanol/water.	1
BCF.	3,16
2-BUTOXYETHANOL	
Partition coefficient: n-octanol/water.	0,81
4-HYDROXY-4-METHYLPENTAN-2-ONE	
Partition coefficient: n-octanol/water.	-0,09
PROPAN-2-OL	
Partition coefficient: n-octanol/water.	0,05
N-BUTYL ACETATE	
Partition coefficient: n-octanol/water.	2,3
BCF.	15,3

12.4. Mobility in soil.

XYLENE (MIXTURE OF ISOMERS)	
Partition coefficient: soil/water.	2,73
BUTANOL	
Partition coefficient: soil/water.	0,388
N-BUTYL ACETATE	
Partition coefficient: soil/water.	< 3

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.

SECTION 14. Transport information.

14.1. UN number.

ADR / RID, IMDG, IATA:	1263

14.2. UN proper shipping name.

ADR / RID:	PAINT or PAINT RELATED MATERIAL
IMDG:	PAINT or PAINT RELATED MATERIAL
IATA:	PAINT or PAINT RELATED MATERIAL

14.3. Transport hazard class(es).

ADR / RID:	Class: 3	Label: 3
IMDG:	Class: 3	Label: 3
IATA:	Class: 3	Label: 3

14.4. Packing group.

ADR / RID, IMDG, IATA:	II

14.5. Environmental hazards.

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user.

ADR / RID:	HIN - Kemler: 33	Limited	Tunnel

		Quantities: 5 L	restriction code: (D/E)
	Special Provision: 640C		
IMDG:	EMS: F-E, S-E	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 364
	Pass.:	Maximum quantity: 5 L	Packaging instructions: 353
	Special Instructions:	A3, A72, A192	

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

Information not relevant.

SECTION 15. Regulatory information.

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

Seveso category. None.

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

Product.
Point. 3 - 40

Contained substance.

Point. 48 TOLUENE

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisarion (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.

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information.

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

Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Repr. 2	Reproductive toxicity, category 2
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
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
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

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

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

GENERAL BIBLIOGRAPHY

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
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
- 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
- ECHA website

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.

Changes to previous review:
The following sections were modified:
02 / 03 / 09 / 10 / 11 / 12 / 14 / 15.