Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878

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

1.1. Product identifier

Product name **TECHNO PRIMER**

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

Intended use **Primer base for subsequent paint applications**

1.3. Details of the supplier of the safety data sheet

TECHNIQUA HANDELS GmbH
Hartleitnerstraße 3
A-4653 Eberstalzell
Tel: +43 (0) 7241 213 79
E-Mail: office@techniqua.at

1.4. Emergency telephone number

For urgent inquiries refer to Poisoning Information Centre (VIZ), Stubenring 6, A-1010 Vienna, Emergency call 0-24 hrs: +43 1 406 43 43, Office hours: Monday to Friday, 8 to 16 hrs, Tel.: +43 1 406 68 98

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.
Acute toxicity, category 4	H312	Harmful in contact with skin.
Acute toxicity, category 4	H332	Harmful if inhaled.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
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	H335	May cause respiratory irritation.

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.
H312+H332	Harmful in contact with skin or if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
EUH208	Contains: p-tert-butylphenyl 1-(2,3-epoxy)propyl ether May produce an allergic reaction.

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 no expose to temperatures exceeding 50°C / 122°F.
P501	Dispose of contents / container to . . .
P102	Keep out of reach of children.
P211	Do not spray on an open flame or other ignition source.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.

Contains: reaction mass of ethylbenzene and xylene

Statements on the aspiration toxicity classification were not included in the label elements, based on section 1.3.3. of Annex I to CLP.

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 1272/2008 (CLP)
reaction mass of ethylbenzene and xylene CAS -	50 ≤ x < 55	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335 STA Dermal: 1100 mg/kg, STA Inhalation mists/powders: 1,5 mg/l
EC 905-588-0		
INDEX -		
REACH Reg. 01-2119488216-32-XXXX		
PROPANE		
CAS 74-98-6	15 ≤ x < 17,5	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		
REACH Reg. 01-2119486944-21		
BUTANE		
CAS 106-97-8	14 ≤ x < 15,5	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		
REACH Reg. 01-2119474691-32-XXXX		
ISOBUTANE		
CAS 75-28-5	5 ≤ x < 6,5	Flam. Gas 1A H220, Press. Gas H280, Classification note according to Annex VI to the CLP Regulation: C, U
EC 200-857-2		
INDEX 601-004-00-0		
REACH Reg. 01-2119485395-27-XXXX		
ETHYL ACETATE		
CAS 141-78-6	5 ≤ x < 6,5	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC 205-500-4		
INDEX 607-022-00-5		
REACH Reg. 01-2119475103-46-XXXX		
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether CAS 3101-60-8	0,3 ≤ x < 0,35	Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC 221-453-2		
INDEX -		
Triclorometano		
CAS 67-66-3	0 ≤ x < 0,05	Carc. 2 H351, Repr. 2 H361d, Acute Tox. 3 H331, Acute Tox. 4 H302, STOT RE 1 H372, Eye Irrit. 2 H319, Skin Irrit. 2 H315 LD50 Oral: 908 mg/kg, STA Inhalation vapours: 3 mg/l, STA Inhalation mists/powders: 0,501 mg/l, STA Inhalation gas: 700 ppm
EC 200-663-8		
INDEX 602-006-00-4		

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: 38,00 %

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

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

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

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

SECTION 7. Handling and storage

7.1. Precautions for safe handling

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

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.

Storage class TRGS 510 (Germany):
2B

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

CZE	Česká Republika	Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
FIN	Suomi	HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÅRDSMINISTERIETS PUBLIKATIONER 2020:25
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ ``σχετικά με

		την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία``»
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
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
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
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
SWE	Sverige	Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2020

reaction mass of ethylbenzene and xylene

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		434	100	651	150	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg
Normal value for water, intermittent release	0,327	mg/l
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/d				
Inhalation	260 mg/m3	65,3 mg/m3	260 mg/m3	65,3 mg/m3	442 mg/m3	221 mg/m3	442 mg/m3	221 mg/m3
Skin				125 mg/kg bw/d				212 mg/kg bw/d

PROPANE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	1800	1000	7200	4000	
MAK	DEU	1800	1000	7200	4000	
TLV	DNK	1800	1000			
VLA	ESP		1000			
HTP	FIN	1500	800	2000	1100	
TLV	GRC	1800	1000			
TLV	NOR	900	500			

NDS/NDSCh	POL	1800					

BUTANE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	2400	1000	9600	4000		
MAK	DEU	2400	1000	9600	4000		
TLV	DNK	1200	500				
VLA	ESP		1000				Gases
VLEP	FRA	1900	800				
HTP	FIN	1900	800	2400	1000		
TLV	GRC	2350	1000				
GVI/KGVI	HRV	1450	600	1810	750		
TLV	NOR	600	250				
NDS/NDSCh	POL	1900		3000			
WEL	GBR	1450	600	1810	750		
WEL	GBR		4			RESP	
TLV-ACGIH					1000		

ISOBUTANE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	2400	1000	9600	4000	
HTP	FIN	1900	800	2400	1000	

ETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
TLV	CZE	700	191,1	900	245,7		
AGW	DEU	730	200	1460	400		
MAK	DEU	750	200	1500	400		
TLV	DNK	540	150				E
VLA	ESP	734	200	1468	400		
VLEP	FRA	734	200	1468	400		
HTP	FIN	730	200	1470	400		
TLV	GRC	734	200	1468	400		
GVI/KGVI	HRV	734	200	1468	400		
TLV	NOR	734	200				
VLE	PRT	734	200	1468	400		
NDS/NDSCh	POL	734		1468			

NGV/KGV	SWE	550	150	1100	300				
WEL	GBR	734	200	1468	400				
OEL	EU	734	200	1468	400				
TLV-ACGIH		1441	400						

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,24	mg/l
Normal value in marine water	0,02	mg/l
Normal value for fresh water sediment	1,15	mg/kg/d
Normal value for marine water sediment	0,115	mg/kg/d
Normal value of STP microorganisms	650	mg/l
Normal value for the food chain (secondary poisoning)	200	mg/kg
Normal value for the terrestrial compartment	0,148	mg/kg/d

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				4,5 mg/kg bw/d				
Inhalation	734 mg/m3	734 mg/m3	367 mg/m3	367 mg/m3	1468 mg/m3	1468 mg/m3	734 mg/m3	734 mg/m3
Skin				37 mg/kg bw/d				63 mg/kg bw/d

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,0075	mg/l
Normal value in marine water	0,00075	mg/l
Normal value for fresh water sediment	33,54	mg/kg/d
Normal value for marine water sediment	3354	mg/kg/d
Normal value for water, intermittent release	0,075	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	11,4	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			19,6 mg/m3	19,6 mg/m3			19,6 mg/m3	19,6 mg/m3
Skin						5,6 mg/kg bw/d		5,6 mg/kg bw/d

Triclorometano

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	10	2			SKIN

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,146	mg/l
Normal value in marine water	0,015	mg/l

Normal value for fresh water sediment	0,45	mg/kg
Normal value for marine water sediment	0,09	mg/kg
Normal value for water, intermittent release	0,133	mg/l
Normal value of STP microorganisms	0,048	mg/l
Normal value for the terrestrial compartment	0,56	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						333 mg/m3	2,5 mg/m3	2,5 mg/m3
Skin								0,94 mg/kg bw/d

Legend:

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

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

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

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).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

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.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	aerosol	
Colour	amber	Temperature: 20 °C
Odour	typical of solvent	
Odour threshold	Not determined	
Melting point / freezing point	Not available	
Initial boiling point	< 0 °C	Method:ASTM D 1120
Flammability	flammable gas	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Flash point	< 0 °C	Method:ASTM D 93
Auto-ignition temperature	> 250 °C	
Decomposition temperature	Not determined	
pH	Not applicable	Reason for missing data:Not applicable to organic solvents.
Kinematic viscosity	Not determined	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not determined	
Vapour pressure	Not available	
Density and/or relative density	Not available	
Relative vapour density	Not available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes
Information not available

9.2.2. Other safety characteristics

Evaporation rate	Not determined
VOC (Directive 2010/75/EC)	98,78 % - 985.824,40 g/litre
VOC (volatile carbon)	77,12 %
Oxidising properties	Not oxidizing
Melting or freezing point	0°C

SECTION 10. Stability and reactivity

10.1. Reactivity

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

ETHYL ACETATE

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

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.

ETHYL ACETATE

Risk of explosion on contact with: alkaline metals,hydrides,oleum.May react violently with: fluorine,strong oxidising agents,chlorosulphuric acid,potassium tert-butoxide.Forms explosive mixtures with: air.

10.4. Conditions to avoid

Avoid overheating.

ETHYL ACETATE

Avoid exposure to: light,sources of heat,naked flames.

10.5. Incompatible materials

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

ETHYL ACETATE

Incompatible with: acids,bases,strong oxidants,aluminium,nitrates,chlorosulphuric acid.Incompatible materials: plastic materials.

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

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.

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

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

ATE (Inhalation - mists / powders) of the mixture:	1,7 mg/l
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	1240,00 mg/kg

reaction mass of ethylbenzene and xylene

LD50 (Oral):	> 3523 mg/kg (Rat)
LD50 (Dermal):	> 2000 mg/kg (Rabbit)
STA (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)
LC50 (Inhalation mists/powders):	> 27,571 mg/l/4h (Rat)
STA (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)

ISOBUTANE

LC50 (Inhalation vapours):	52000 ppm/2h (Rat)

ETHYL ACETATE

LD50 (Oral):	4934 mg/kg (Rat)
LD50 (Dermal):	> 20000 mg/kg (Rabbit)
LC50 (Inhalation mists/powders):	> 22,5 mg/l/6h (Rat)

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether

LD50 (Oral):	> 2000 mg/kg (Rat)

LD50 (Dermal):	> 2000 mg/kg (Rat)

Triclorometano

LD50 (Oral):	908 mg/kg (Rat)
LD50 (Dermal):	> 3980 mg/kg (Rabbit)

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD

Toxic for aspiration

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

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Triclorometano	
LC50 - for Fish	18,2 ppm/96h (Oncorhynchus mykiss)
EC50 - for Crustacea	152,8 mg/l/48h (Daphnia magna)
Chronic NOEC for Fish	0,151 mg/l (Oryzias latipes)
Chronic NOEC for Crustacea	6,3 mg/l (Daphnia magna)
ETHYL ACETATE	
LC50 - for Fish	230 mg/l/96h (Pimephales promelas)
EC50 - for Crustacea	165 mg/l/48h (Daphnia magna)
Chronic NOEC for Crustacea	2,4 mg/l (Daphnia pulex)
Chronic NOEC for Algae / Aquatic Plants	> 100 mg/l (Scenedesmus subspicatus)
reaction mass of ethylbenzene and xylene	
LC50 - for Fish	2,6 mg/l/96h (Oncorhynchus mykiss)
EC50 - for Algae / Aquatic Plants	2,2 mg/l/72h (Chlorella vulgaris)
Chronic NOEC for Fish	> 1,39 mg/l (Oncorhynchus kisutch)
Chronic NOEC for Crustacea	0,74 mg/l (Ceriodaphnia dubia)
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	
LC50 - for Fish	7,5 mg/l/96h (Oncorhynchus mykiss)(metodo OCSE 203)
EC50 - for Crustacea	67,9 mg/l/48h (Daphnia magna)(metodo OCSE 202)

12.2. Persistence and degradability

Trichlorometano
Entirely degradable

BUTANE
Solubility in water 0,1 - 100 mg/l
Rapidly degradable

PROPANE
Solubility in water 0,1 - 100 mg/l
Rapidly degradable

ETHYL ACETATE
Solubility in water > 10000 mg/l
Rapidly degradable

reaction mass of ethylbenzene and xylene
Solubility in water 60 mg/l
Degradability: information not available

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether
NOT rapidly degradable

1,1% - 28 d

12.3. Bioaccumulative potential

Trichlorometano
Partition coefficient: n-octanol/water 1,97 Log Kow

BUTANE
Partition coefficient: n-octanol/water < 2,8

PROPANE
Partition coefficient: n-octanol/water 1,09

ETHYL ACETATE
Partition coefficient: n-octanol/water 0,68
BCF 30

reaction mass of ethylbenzene and xylene
Partition coefficient: n-octanol/water 3,16 Log Kow
BCF 29 -

12.4. Mobility in soil

reaction mass of ethylbenzene and xylene

Partition coefficient: soil/water 2,73 mg/l

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.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1950

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

ADR / RID: Class: 2 Label: 2.1

IMDG:	Class: 2	Label: 2.1
IATA:	Class: 2	Label: 2.1

14.4. Packing group

ADR / RID, IMDG, IATA:	-

14.5. Environmental hazards

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: --	Limited Quantities: 1 L	Tunnel restriction code: (D)
	Special provision: -		
IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 150 Kg	Packaging instructions: 203
	Pass.:	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/EC: P3a

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 (EC) No. 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 (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 been performed for the following contained substances

reaction mass of ethylbenzene and xylene

PROPANE

BUTANE

ISOBUTANE

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
Press. Gas	Pressurised gas
Carc. 2	Carcinogenicity, category 2
Repr. 2	Reproductive toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
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
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
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
Skin Sens. 1	Skin sensitization, 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.
H361d	Suspected of damaging the unborn child.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H312+H332	Harmful in contact with skin or if inhaled.
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.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- 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: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

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5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
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- The Merck Index. - 10th Edition
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- IFA GESTIS website
- ECHA website
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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:
09.