

Safety Data Sheet

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

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

1.1. Product identifier

Product name **CARBOTACK02-A.NT**
UFI : **8910-J030-A00G-KRWW**

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

Intended use **Epoxy spray adhesive for composite materials**

Identified Uses	Industrial	Professional	Consumer
Use of spray adhesives for bonding composite materials	✓	✓	-
Uses Advised Against			
Do not use for uses other than those indicated			

1.3. Details of the supplier of the safety data sheet

Name **DUERF S.R.L.**
Full address **Via delle Fosse, 8 - Loc. Vallese**
District and Country **37050 Oppeano (Verona) Italia**
Tel. **+39 045 2456476**
e-mail address of the competent person responsible for the Safety Data Sheet **info@duerf.com**
Supplier: **DUERF S.r.l., via delle fosse n.8 - Loc. Vallese - 37050 Oppeano (VR) Italy**

1.4. Emergency telephone number

For urgent inquiries refer to **+39 045 2456476 (office hours: 8:30 am-12:30 pm, 1:30 pm-5:00 pm, Monday-Friday). Information available in English.**

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:		
Aerosol, category 1	H222	Extremely flammable aerosol.
	H229	Pressurised container: may burst if heated.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



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SECTION 2. Hazards identification ... / >>

Signal words:

Danger

Hazard statements:

H222

H229

H319

H315

H317

H336

H412

EUH205

Extremely flammable aerosol.

Pressurised container: may burst if heated.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

May cause drowsiness or dizziness.

Harmful to aquatic life with long lasting effects.

Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

P210

P211

P251

P261

P273

P410+P412

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Avoid breathing gases / mist / vapors / aerosols.

Avoid release to the environment.

Protect from sunlight. Do no expose to temperatures exceeding 50°C / 122°F.

Contains:

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Acetone

Dimethyl ether

Butanone

2.3. Other hazards

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

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<div><div>Dimethyl ether</div><div>INDEX603-019-00-8</div><div>EC204-065-8</div><div>CAS115-10-6</div><div>REACH Reg.01-2119472128-37-XXXX</div></div>	50 ≤ x < 80	Flam. Gas 1A H220, Press. Gas (Liq.) H280, STOT SE 3 H336, Classification note according to Annex VI to the CLP Regulation: U
<div><div>Acetone</div><div>INDEX606-001-00-8</div><div>EC200-662-2</div><div>CAS67-64-1</div><div>REACH Reg.01-2119471330-49</div></div>	10 ≤ x < 20	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
<div><div>bis-[4-(2,3-epoxipropoxi)phenyl]propane</div><div>INDEX603-073-00-2</div><div>EC216-823-5</div><div>CAS1675-54-3</div><div>REACH Reg.01-2119456619-26</div></div>	2,5 ≤ x < 5	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411 Skin Irrit. 2 H315: ≥ 5%, Eye Irrit. 2 H319: ≥ 5%

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SECTION 3. Composition/information on ingredients ... / >>

Butanone

INDEX 606-002-00-3 1 ≤ x < 5

EC 201-159-0

CAS 78-93-3

REACH Reg. 01-2119457290-43

Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

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.

SECTION 4. First aid measures

4.1. Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice/attention. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

Rescuer protection

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

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

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

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

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

If symptoms occur, whether acute or delayed, consult a doctor.

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

Running water for skin and eye wash.

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

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

UNSUITABLE EXTINGUISHING EQUIPMENT

Direct 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 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

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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

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)

No specific end use information available.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory references:

BGR	Bългария	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.)
CZE	Česká Republika	NAŘÍZENÍ VLÁDY ze dne 10. května 2021, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci
DEU	Deutschland	Forschungsgemeinschaft MAK- und BAT-Werte-Liste 2022 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe Mitteilung 58
ESP	España	Límites de exposición profesional para agentes químicos en España 2023
EST	Eesti	Ohtlike kemikaalide ja neid sisaldavate materjalide kasutamise töötervishoiu ja tööohutuse nõuded ning töökeskkonna keemiliste ohutegurite piirnormid [RT I, 21.12.2022, 14]
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021
FIN	Suomi	HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÄRDSMINISTERIETS PUBLIKATIONER 2020:25

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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 μεταλλαξιογόνους παράγοντες κατά την εργασία"»	
HUN	Magyarország	Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről	
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemičkim na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)	
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81	
LTU	Lietuva	Jsakymas dėl lietuvis higienos normos hn 23:2011 „cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai“ patvirtinimo	
LVA	Latvija	Grozījumi Ministru kabineta 2007. gada 15. maija noteikumos Nr. 325 "Darba aizsardzības prasības saskarē ar ķīmiskajām vielām darba vietās" (prot. Nr. 32 18. §; prot. Nr. 1 22. §)	
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit	
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	
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006	
SWE	Sverige	Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1)	
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)	
TUR	Türkiye	Kimyasal Maddelerle Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik 12.08.2013 / 28733; 20.10.2023 / 32345.	
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)	
EU	OEL EU	Directive (EU) 2022/431; 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 2023	

SECTION 8. Exposure controls/personal protection ... / >>

Acetone								
Threshold Limit Value								
Type	Country	TWA/8h		STEL/15min		Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
TLV	BGR	600		1400				
TLV	CZE	800	331,2	1500	621			
AGW	DEU	1200	500	2400 (C)	1000 (C)			
MAK	DEU	1200	500	2400	1000			
VLA	ESP	1210	500					
TLV	EST	1210	500					
VLEP	FRA	1210	500	2420	1000			
HTP	FIN	1200	500	1500	630			
TLV	GRC	1780		3560				
AK	HUN	1210						
GVI/KGVI	HRV	1210	500					
VLEP	ITA	1210	500					
RD	LTU	1210	500	2420	1000	SKIN		
RV	LVA	1210	500					
TGG	NLD	1210	500	2420	1000			
VLE	PRT	1210	500					
NDS/NDSch	POL	600		1800				
TLV	ROU	1210	500					
NGV/KGV	SWE	600	250	1200 (C)	500 (C)			
MV	SVN	1210	500	2420	1000			
ESD	TUR	1210	500					
WEL	GBR	1210	500	3620	1500			
OEL	EU	1210	500					
TLV-ACGIH			250		500			
Predicted no-effect concentration - PNEC								
Normal value in fresh water						10,6	mg/l	
Normal value in marine water						1,06	mg/l	
Normal value for fresh water sediment						30,4	mg/kg	
Normal value for marine water sediment						3,04	mg/kg	
Normal value for water, intermittent release						21	mg/l	
Normal value of STP microorganisms						100	mg/l	
Normal value for the terrestrial compartment						29,5	mg/kg	
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	VND	VND	VND	62 mg/kg				
Inhalation	VND	VND	VND	200 mg/m3	2420 mg/m3	VND	VND	1210 mg/m3
Skin	VND	VND	VND	62 mg/kg	VND	VND	VND	186 mg/kg

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SECTION 8. Exposure controls/personal protection ... / >>

Dimethyl ether						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	1900	1000	15200	8000	
MAK	DEU	1900	1000	15200	8000	
VLA	ESP	1920	1000			
VLEP	FRA	1920	1000			
HTP	FIN	2000	1000			
AK	HUN	1920				
VLEP	ITA	1920	1000			
RV	LVA	1920	1000			
TGG	NLD	950		1500		
NDS/NDSch	POL	1000				
TLV	ROU	1920	1000			
NGV/KGV	SWE	950	500	1500	800	
ESD	TUR	1920	1000			
WEL	GBR	766	400	958	500	
OEL	EU	1920	1000			

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,155	mg/l
Normal value in marine water	0,016	mg/l
Normal value for fresh water sediment	0,681	mg/kg
Normal value for marine water sediment	0,069	mg/kg
Normal value for water, intermittent release	1,549	mg/l
Normal value of STP microorganisms	160	mg/l
Normal value for the terrestrial compartment	0,045	mg/kg

Health - Derived no-effect level - DNEL / DMEL

[illegible]

SECTION 8. Exposure controls/personal protection ... / >>

				Butanone				
Threshold Limit Value								
Type	Country	TWA/8h		STEL/15min		Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
TLV	BGR	590		885				
TLV	CZE	600	200,4	900	300,6			
AGW	DEU	600	200	600	200	SKIN		
MAK	DEU	600	200	600	200	SKIN		
VLA	ESP	600	200	900	300			
TLV	EST	600	200	900	300			
VLEP	FRA	600	200	900	300	SKIN		
HTP	FIN	60	20	300	100			
TLV	GRC	600	200	900	300			
AK	HUN	600		900		SKIN		
GVI/KGVI	HRV	600	200	900	300			
VLEP	ITA	600	200	900	300			
RD	LTU	600	200	900	300			
RV	LVA	200	67	900	300			
TGG	NLD	590	197	900	300	SKIN		
VLE	PRT	600	200	900	300			
NDS/NDSch	POL	450		900		SKIN		
TLV	ROU	600	200	900	300			
NGV/KGV	SWE	150	50	900	300			
MV	SVN	600	200	900	300	SKIN		
ESD	TUR	600	200	900	300			
WEL	GBR	600	200	900	300	SKIN		
OEL	EU	600	200	900	300			
TLV-ACGIH		590	200	885	300			
Predicted no-effect concentration - PNEC								
Normal value in fresh water						55,8	mg/l	
Normal value in marine water						55,8	mg/l	
Normal value for fresh water sediment						284,74	mg/kg	
Normal value for marine water sediment						284,7	mg/kg	
Normal value of STP microorganisms						709	mg/l	
Normal value for the food chain (secondary poisoning)						1000	mg/kg	
Normal value for the terrestrial compartment						22,5	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		NPI		31 mg/kg bw/d				
Inhalation	NPI	405 mg/m3	NPI	106 mg/m3	NPI	900 mg/m3	NPI	600 mg/m3
Skin	NPI	NPI	NPI	412 mg/kg bw/d	NPI	NPI	NPI	1161 mg/kg bw/d

bis-[4-(2,3-epoxipropoxy)phenyl]propane

Normal value in fresh water	0,006	mg/l
Normal value in marine water	0,001	mg/l
Normal value for fresh water sediment	0,341	mg/kg dw
Normal value for marine water sediment	0,034	mg/kg dw
Normal value for marine water, intermittent release	0,018	mg/l
Normal value for fresh water, intermittent release	0,0018	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	11	mg/kg food
Normal value for the terrestrial compartment	0,065	mg/kg
Normal value for the atmosphere	NPI	

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		NPI		0,5 mg/kg bw/d				
Inhalation	MED	NPI	MED	0,87 mg/m3	MED	NPI	MED	4,93 mg/m3
Skin	MED	NPI	MED	0,0893 mg/kg bw/d	MED	NPI	MED	0,75 mg/kg bw/d

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

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

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SECTION 9. Physical and chemical properties ... / >>					
Lower explosive limit	1,5	% (v/v)	Remark:GESTIS website Substance:Butanone		
Upper explosive limit	24,4	% (v/v)	Remark:GESTIS website Substance:Dimethyl ether		
Flash point	not applicable		Reason for missing data:not applicable		
Auto-ignition temperature	226	°C	Remark:ECHA website Substance:Dimethyl ether		
Decomposition temperature	not applicable		Reason for missing data:not applicable		
pH	not applicable		Reason for missing data:substance/mixture is non-polar/aprotic (eg: an organic solvent mixture)		
Kinematic viscosity	not applicable		Reason for missing data:not applicable		
Solubility	soluble in organic solvents				
Partition coefficient: n-octanol/water	not applicable		Reason for missing data:not applicable		
Vapour pressure	760	kPa	Temperature: 50 °C		
Density and/or relative density	0,81	g/cm3			
Relative vapour density	not available		Reason for missing data:unavailable		
Particle characteristics	not applicable				
9.2. Other information					
9.2.1. Information with regard to physical hazard classes					
Information not available					
9.2.2. Other safety characteristics					
VOC (Directive 2010/75/EU)	80,00 %	-	648,00	g/litre	
VOC (volatile carbon)	43,79 %	-	354,73	g/litre	
SECTION 10. Stability and reactivity					
10.1. Reactivity					
There are no particular risks of reaction with other substances in normal conditions of use.					
Acetone Decomposes under the effect of heat.					
Butanone Reacts with: light metals,strong oxidants.Attacks various types of plastic materials.Decomposes under the effect of heat.					
10.2. Chemical stability					
The product is stable in normal conditions of use and storage.					
Dimethyl ether 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.					
Acetone Risk of explosion on contact with: bromine trifluoride,fluorine dioxide,hydrogen peroxide,nitrosyl chloride,2-methyl-1,3 butadiene,nitromethane,nitrosyl perchlorate. May react dangerously with: potassium tert-butoxide,alkaline hydroxides,bromine,bromoform,isoprene,sodium,sulphur,chromium trioxide,chromyl chloride,nitric acid,chloroform,peroxymonosulphuric acid,phosphoryl oxychloride,chromosulphuric acid,fluorine,strong oxidising agents,strong reducing agents. Develops flammable gas on contact with: nitrosyl perchlorate.					
Dimethyl ether May form explosive mixtures with: air,strong oxidants,nitrates,fluorine,liquid oxygen. May react dangerously with: acids,strong alkalis.					
Butanone May form peroxides with: air,light,strong oxidising agents.Risk of explosion on contact with: hydrogen peroxide,nitric acid,sulphuric acid.May react dangerously with: oxidising agents,trichloromethane,alkalis.Forms explosive mixtures with: air.					
10.4. Conditions to avoid					
EPY 11.8.2 - SDS 1004.14					

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SECTION 10. Stability and reactivity ... / >>				
Avoid overheating.				
Acetone Avoid exposure to: sources of heat,naked flames.				
Dimethyl ether Avoid exposure to: heat,naked flames,ignition sources,electrostatic discharges. Keep away from: strong acids,strong alkalis,strong oxidising agents.				
Butanone Avoid exposure to: sources of heat.				
10.5. Incompatible materials				
Strong reducing or oxidising agents, strong acids or alkalis, hot material.				
Acetone Incompatible with: acids,oxidising substances.				
Dimethyl ether Avoid contact with: hydrofluoric acid,strong oxidising agents,oxygen,strong acids,alkalis.				
Butanone Incompatible with: strong oxidants,inorganic acids,ammonia,copper,chloroform.				
bis-[4-(2,3-epoxipropoxi)phenyl]propane Incompatible with: strong acids,strong bases,strong oxidising agents.				
10.6. Hazardous decomposition products				
Acetone May develop: ketenes,irritant substances.				
SECTION 11. Toxicological information				
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008				
<u>Metabolism, toxicokinetics, mechanism of action and other information</u>				
Information not available				
<u>Information on likely routes of exposure</u>				
Information not available				
<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u>				
Information not available				
<u>Interactive effects</u>				
Information not available				
<u>ACUTE TOXICITY</u>				
ATE (Inhalation) of the mixture:		Not classified (no significant component)		
ATE (Oral) of the mixture:		Not classified (no significant component)		
ATE (Dermal) of the mixture:		Not classified (no significant component)		
Acetone				
LD50 (Dermal):		7400 mg/kg Rabbit		
LD50 (Oral):		5800 mg/kg/24 h Rat		
LC50 (Inhalation mists/powders):		76 mg/l/4h Rat		
Dimethyl ether				
LC50 (Inhalation vapours):		309018 mg/m3 Rat		
Butanone				
LD50 (Dermal):		> 5000 mg/kg Rabbit		
LD50 (Oral):		2193 mg/kg Rat		
		0 mg/l/4h NESSUN DATO DISPONIBILE. Tox acuta: minimamente tossico.		
LC50 (Inhalation vapours):		Irritazione: pericolo trascurabile.		
bis-[4-(2,3-epoxipropoxi)phenyl]propane				
LD50 (Dermal):		> 2000 mg/kg Rat or Rabbit		
LD50 (Oral):		> 2000 mg/kg Rat		

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SECTION 11. Toxicological information ... / >>			
<div>SKIN CORROSION / IRRITATION</div> <div>Causes skin irritation</div> <div>SERIOUS EYE DAMAGE / IRRITATION</div> <div>Causes serious eye irritation</div> <div>RESPIRATORY OR SKIN SENSITISATION</div> <div>Sensitising for the skin</div> <div>GERM CELL MUTAGENICITY</div> <div>Does not meet the classification criteria for this hazard class</div> <div>CARCINOGENICITY</div> <div>Does not meet the classification criteria for this hazard class</div> <div>REPRODUCTIVE TOXICITY</div> <div>Does not meet the classification criteria for this hazard class</div> <div>STOT - SINGLE EXPOSURE</div> <div>May cause drowsiness or dizziness</div> <div>STOT - REPEATED EXPOSURE</div> <div>Does not meet the classification criteria for this hazard class</div> <div>ASPIRATION HAZARD</div> <div>Does not meet the classification criteria for this hazard class</div>			
11.2. Information on other hazards			
Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.			
SECTION 12. Ecological information			
This product is dangerous for the environment and the aquatic organisms. In the long term, it has negative effects on the aquatic environment.			
12.1. Toxicity			
<div>Acetone</div> <div>LC50 - for Fish5540 mg/l/96h Onocorhynchus mykiss</div> <div>EC50 - for Crustacea8800 mg/l/48h Daphnia pulex</div> <div>Chronic NOEC for Crustacea2212 mg/l Daphnia magna</div> <div>Dimethyl ether</div> <div>LC50 - for Fish> 4,1 g/l/96h Poecilia reticulata (Guppy)</div> <div>EC50 - for Crustacea> 4,4 g/l/48h Daphnia magna (Pulce d'acqua grande)</div> <div>EC50 - for Algae / Aquatic Plants154,9 mg/l/96h algae</div> <div>Butanone</div> <div>LC50 - for Fish2993 mg/l/96h Pimephales promelas</div> <div>EC50 - for Crustacea308 mg/l/48h Daphnia magna</div> <div>EC50 - for Algae / Aquatic Plants1220 mg/l/72h (ECHA website)</div> <div>bis-[4-(2,3-epoxipropoxi)phenyl]propane</div> <div>LC50 - for Fish2 mg/l/96h</div> <div>EC50 - for Crustacea1,8 mg/l/48h Daphnia magna</div> <div>EC50 - for Algae / Aquatic Plants11 mg/l/72h</div>			
12.2. Persistence and degradability			
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SECTION 12. Ecological information ... / >>				
Acetone Rapidly degradable				
Dimethyl ether Solubility in water 45600 mg/l a 25°C/77°F (ECHA website) NOT rapidly degradable				
Butanone Solubility in water 22000 mg/l Rapidly degradable				
bis-[4-(2,3-epoxipropoxi)phenyl]propane Solubility in water 6,9 mg/l/20°C (ECHA website) NOT rapidly degradable				
12.3. Bioaccumulative potential				
Acetone Partition coefficient: n-octanol/water -0,24 BCF 3				
Butanone Partition coefficient: n-octanol/water 0,3				
bis-[4-(2,3-epoxipropoxi)phenyl]propane Partition coefficient: n-octanol/water 3,242 Log Kow BCF 31 l/kg				
12.4. Mobility in soil				
Information not available				
12.5. Results of PBT and vPvB assessment				
On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.				
12.6. Endocrine disrupting properties				
Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.				
12.7. Other adverse effects				
Information not available				
SECTION 13. Disposal considerations				
13.1. Waste treatment methods				
Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Waste transportation may be subject to ADR restrictions. The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE. 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: UN 1950				
EPY 11.8.2 - SDS 1004.14				

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SECTION 14. Transport information ... / >>					
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:		not marine pollutant			
IATA:		NO			
14.6. Special precautions for user					
ADR / RID:		HIN - Kemler: --	Limited Quantities: 1 lt	Tunnel restriction code: (D)	
		Special provision: 190, 327, 344, 625			
IMDG:		EMS: F-D, S-U	Limited Quantities: 1 lt		
IATA:		Cargo:	Maximum quantity: 150 kg	Packaging instructions: 203	
		Passengers:	Maximum quantity: 75 kg	Packaging instructions: 203	
		Special provision:	A145, A167, A802		
14.7. Maritime transport in bulk according to IMO instruments					
Information not relevant					
SECTION 15. Regulatory information					
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture					
Seveso Category - Directive 2012/18/EU:			P3a		
Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006					
Product					
Point		40			
Contained substance					
Point		75			
Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors					
Regulated explosives precursor					
The acquisition, introduction, possession or use of that regulated explosives precursor by members of the general public is subject to reporting obligations as set out in Article 9.					
All suspicious transactions and significant disappearances and thefts must be reported to the relevant national contact point.					
Substances in Candidate List (Art. 59 REACH)					
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.					
Substances subject to authorisation (Annex XIV REACH)					
None					
Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:					

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SECTION 15. Regulatory information ... / >>

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.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 2: Hazard to waters

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
Press. Gas (Liq.)	Liquefied gas
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level

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SECTION 16. Other information ... / >>

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

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
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17. Regulation (EU) 2019/1148
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19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
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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.

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.

SECTION 16. Other information ... / >>

Changes to previous review:
The following sections were modified:
03 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15.