Printing date 01.04.2019

Version number 7

llifire **Smart Protection**

Revision: 26.03.2019

SECTION dundertaking		cation of the substance/mixture and	of the company/				
· 1.1 Product ic	dentifier						
· Trade name: Nullifire FF197							
 1.2 Relevant i No further rele 	 • MSDS code: A-N-FF197 • 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available. • Application of the substance / the mixture Sealant 						
Manufacturer tremco illbruck Vlietskade 103 T: +31 (0) 183	 • 1.3 Details of the supplier of the safety data sheet • Manufacturer/Supplier: tremco illbruck Productie B.V. • Vlietskade 1032, 4241 WC Arkel • T: +31 (0) 183568000, F: +31 (0) 183568100 msds@tremco-illbruck.com 						
T: +44 (0) 194	: Ltd d, Hindley G 2251400, F:	nable from: reen, Wigan, WN2 4HT +44 (0) 1942251410 uk.info@tremco-illbruck.com					
	hours tel.: +	number: 14 (0) 1942251400. At all other times it is recomm 01 809 2166 (ROI), or otherwise to contact a docto					
SECTION 2	: Hazards	identification					
		ubstance or mixture to Regulation (EC) No 1272/2008					
Aerosol 1	H222-H229	Extremely flammable aerosol. Pressurised contain	er: May burst if heated.				
Acute Tox. 4	H332	Harmful if inhaled.					
Skin Irrit. 2	H315	Causes skin irritation.					
Eye Irrit. 2	H319	Causes serious eye irritation.					
Resp. Sens. 1		May cause allergy or asthma symptoms or breathi	ng difficulties if inhaled.				
Skin Sens. 1	H317	May cause an allergic skin reaction.					
Carc. 2	H351	Suspected of causing cancer.					
STOT SE 3	H335	May cause respiratory irritation.					
STOT SE 3	H373	May cause damage to organs through prolonged of	or repeated exposure.				
· 2.2 Label eler · Labelling acc	nents ording to Re	egulation (EC) No 1272/2008 ad labelled according to the CLP regulation.	(Contd. on page 2) GB —				



Revision: 26.03.2019

Printing date 01.04.2019

Version number 7

Trade name: Nullifire FF197

(Contd. of page 1)

· Hazard pictograms



- · Signal word Danger
- · Contains:
- diphenylmethanediisocyanate, isomers and homologues
- · Hazard statements
 - H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
- H332 Harmful if inhaled.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P211 Do not spray on an open flame or other ignition source.
- P251 Do not pierce or burn, even after use.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P284 In case of inadequate ventilation wear respiratory protection.
- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- · Supplemental information:
- EUH204 Contains isocyanates. May produce an allergic reaction.
- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · Description: Active substance with propellant

· Dangerous components:		
CAS: 9016-87-9	diphenylmethanediisocyanate, isomers and homologues Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	30-<50%
EC number: 911-815-4 Reg.nr.: 01-2119486772-26-xxxx	tris(2-chloro-1-methylethyl)phosphate Acute Tox. 4, H302	10-<20%
CAS: 115-10-6 EINECS: 204-065-8 Reg.nr.: 01-2119472128-37-xxxx	dimethyl ether Flam. Gas 1, H220; Press. Gas (Comp.), H280	5-<10%
	(Cont	d. on page 3)



Revision: 26.03.2019

Printing date 01.04.2019

Version number 7

Trade	name [.]	Nullifire	FF197
ITaue	name.	NUIIIIIE	11131

CAS: 75-28-5	isobutane	ontd. of page 2)					
EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	Flam. Gas 1, H220; Press. Gas (Comp.), H280						
CAS: 74-98-6 EINECS: 200-827-9	propane Flam. Gas 1, H220; Press. Gas (Comp.), H280	1-<5%					
Reg.nr.: 01-2119486944-21-xxxx CAS: 36483-57-5		1-<5%					
EINECS: 253-057-0	2,2-dimethylpropan-1-ol, tribromo derivative Eye Irrit. 2, H319						
 SVHC - Additional information: For the wording of the listed hazard phrases refer to section 16. While curing the following substances are formed and released by a reaction with atmospheric humidity: Carbon dioxide (CO2) 							
SECTION 4: First aid meas	ures						
 After inhalation: Supply fresh air and to be sure ca In case of unconsciousness place After skin contact: Immediately wash with water and If symptoms persist consult docto After eye contact: Rinse opened eye for several min After swallowing: Do not induce 4.2 Most important symptoms a Irritating to eyes, respiratory syste May cause an allergic skin reaction Harmful if inhaled. May cause damage to organs throw Information for doctor: No further Hazards No further relevant inform 	eted persons out of danger area and lay down. all for a doctor. a patient stably in side position for transportation. soap and rinse thoroughly. r. butes under running water. If symptoms persist, consult a vomiting; call for medical help immediately. and effects, both acute and delayed em and skin. on. bugh prolonged or repeated exposure. er relevant information available. mation available. medical attention and special treatment needed	ı doctor.					
 For safety reasons unsuitable e 5.2 Special hazards arising from 	nt larger fires with water spray or alcohol resistant foam. Extinguishing agents: Water with full jet						
Nitrogen oxides (NOx)		ontd on page 4)					



Revision: 26.03.2019

Printing date 01.04.2019

Trade name: Nullifire FF197

Version number 7

(Contd. of page 3) Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.: Hydrogen cyanide (HCN) • 5.3 Advice for firefighters • Protective equipment: Wear self-contained respiratory protective device.
SECTION 6: Accidental release measures
 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Avoid contact with the eyes and skin. Ensure adequate ventilation. 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water. 6.3 Methods and material for containment and cleaning up: Dispose of contaminated material as waste according to Section 13. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents 6.4 Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.
 SECTION 7: Handling and storage 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Avoid contact with the eyes and skin. Do not breathe vapour. Wear suitable protective clothing and gloves. Keep away from sources of ignition - No smoking. Information about fire - and explosion protection: Do not spray onto a naked flame or any incandescent material. Protect against electrostatic charges. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. The usual precautionary measures are to be adhered to when handling chemicals.
 7.2 Conditions for safe storage, including any incompatibilities Storage: Requirements to be met by storerooms and receptacles: Observe official regulations on storing packagings with pressurised containers. Information about storage in one common storage facility: Store away from water. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight. 7.3 Specific end use(s) No further relevant information available.
GB- (Contd. on page 5)



(Contd. of page 4)

Revision: 26.03.2019

Printing date 01.04.2019

Version number 7

Trade name: Nullifire FF197

Ingredien	ts with lim	it values that require monitoring at the workplace:	
CAS: 901	6-87-9 diph	enylmethanediisocyanate, isomers and homologues	
Lon		ie: 0.07 mg/m ³ e: 0.02 mg/m ³	
CAS: 115	-10-6 dime	thyl ether	
Lon		ie: 958 mg/m³, 500 ppm e: 766 mg/m³, 400 ppm	
DNELs			
Long tern			
	-	enylmethanediisocyanate, isomers and homologues	
Inhalative		0.05 mg/m3 (workers) (systemic and local effects)	
		0.025 mg/m3 (general public) (systemic and local effects)	
•		ylethyl)phosphate	
Oral	consumer	0.52 mg/kg/24h (general public) (systemic effects)	
Dermal	industrial		
	consumer	1.04 mg/kg/24h (general public) (systemic effects)	
Inhalative	industrial	5.82 mg/m3 (workers) (systemic effects)	
	consumer	1.46 mg/m3 (general public) (systemic effects)	
	-10-6 dime	•	
Inhalative	industrial		
	consumer	471 mg/m3 (general public) (systemic effects)	
Short terr	n effects		
CAS: 901	6-87-9 diph	enylmethanediisocyanate, isomers and homologues	
Dermal	industrial	50 mg/kg/24h (workers) (systemic effects)	
Inhalative	industrial	0.1 mg/m3 (workers) (systemic and local effects)	
	consumer	0.05 mg/m3 (general public) (local effects)	
tris(2-chlo	oro-1-meth	ylethyl)phosphate	
Dermal	industrial	8 mg/kg/24h (workers) (systemic effects)	
	consumer	4 mg/kg/24h (general public) (systemic effects)	
Inhalative	industrial	22.4 mg/m3 (workers) (systemic effects)	
	consumer	11.2 mg/m3 (general public) (systemic effects)	
PNECs		-	
	oro-1-meth	ylethyl)phosphate	
•	64 mg/L (fre		



Revision: 26.03.2019

Printing date 01.04.2019

Version number 7

Trade name: Nullifire FF197

	(Contd. of page 5)
	1.34 mg/kg dwt (sediment (salt water))
CAS: 11	15-10-6 dimethyl ether
PNEC (0.155 mg/L (fresh water)
	160 mg/L (sewage treatment plant)
	1.549 mg/L (intermittent release)
(0.016 mg/L (salt water)
PNEC (0.045 mg/kg (soil)
(0.069 mg/kg (sediment (salt water))
· Additio	nal information: The lists valid during the making were used as basis.
 Persona General The usu Keep av Immedia Wash havoid co Do not in Respira In case exposur This pro appropri For furth please r 	osure controls al protective equipment: I protective and hygienic measures: ual precautionary measures are to be adhered to when handling chemicals. way from foodstuffs, beverages and feed. ately remove all soiled and contaminated clothing ands before breaks and at the end of work. ontact with the eyes and skin. nhale gases / fumes / aerosols. atory protection: of brief exposure or low pollution use respiratory filter device. In case of intensive or longer re use self-contained respiratory protective device. oduct should not be used under conditions of poor ventilation unless a protective mask with an iate gas filter (i.e. type A1 according to standard EN 14387) is used. her guidance, refer to HSE HSG53 "Respiratory Protective Equipment at work - A Practical Guide". ion of hands:
M.	Protective gloves
prepara Due to prepara	missing tests no recommendation to the glove material can be given for the product/ the tion/ the chemical mixture.
Nitrile ru Recomn Butyl rul Recomn • Penetra For the	I of gloves ubber, NBR mended thickness of the material: ≥ 0.4 mm bber, BR mended thickness of the material: ≥ 0.7 mm ation time of glove material mixture of chemicals mentioned below the penetration time has to be at least 480 minutes ation according to EN 374 Part 3: Level 6). (Contd. on page 7)

Safety data sheet according to 1907/2006/EC, Article 31



Revision: 26.03.2019

Printing date 01.04.2019

Version number 7

rade name: Nullifire FF197		
· Eye protection:	(Contd. of pa	age
Tightly sealed goggles		
· Body protection:		
Protective work clothing		
SECTION 9: Physical and ch	emical properties	
 9.1 Information on basic physical General Information 	and chemical properties	
· Appearance:		
Form:	Aerosol	
Colour:	According to product specification	
· Odour:	Characteristic	
· Odour threshold:	Not determined.	
· pH-value:	Not determined.	
 Melting point/freezing point: 	Not applicable, as aerosol. Undetermined.	
· Initial boiling point and boiling ra		
· Flash point:	-97 °C	
· Flammability (solid, gas):	Not applicable.	
· Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Product is not selfigniting.	
· Explosive properties:	Product is not explosive. However, formation of explo air/vapour mixtures are possible.	sive
· Explosion limits:		
Lower:	3.0 Vol %	
Upper:	18.6 Vol %	
· Vapour pressure:	Not determined.	
· Density at 20 °C:	1.06 g/cm ³	
· Relative density	Not determined.	
Vapour density Evaporation rate	Not determined.	
· Evaporation rate	Not applicable.	
 Solubility in / Miscibility with water: 	Insoluble.	
· Partition coefficient: n-octanol/wa	ater: Not determined.	

(Contd. on page 8)



Printing date 01.04.2019

Version number 7

Revision: 26.03.2019

rade name:	Nullifire I	E107		
				(Contd. of page
· Viscosity	/:			
Dynami		N	ot determined.	
Kinema		N	ot determined.	
· Solvent c	content:			
VOC (E		18	81.7 g/l	
VOC (E			5.90 [°] %	
· 9.2 Other	' informat	ion No	o further relevant infor	mation available.
		ability and reactivi	-	
		further relevant informa	ation available.	
· 10.2 Chei				
		sition / conditions to b		
		ⁱ used according to spec hazardous reactions	cincations.	
Flammabl				
Danger of				
· 10.4 Con		avoid		
Water / m	oisture.			
				er ignition sources. No smoking.
	-	materials: No further re		ailable.
	ardous de	composition products	2'	
	oftavia			line
		ases is possible during		fire.
Carbon m	ionoxide a	ases is possible during nd carbon dioxide		ire.
Carbon m Nitrogen d	ionoxide a oxides (NC	ases is possible during nd carbon dioxide Dx)	heating or in case of f	
Carbon m Nitrogen o Under cer	ionoxide a oxides (NC rtain fire co	ases is possible during nd carbon dioxide	heating or in case of f	
Carbon m Nitrogen o Under cer Hydrogen	ionoxide a oxides (NC rtain fire co cyanide (ases is possible during nd carbon dioxide Dx) onditions, traces of othe	heating or in case of f er toxic gases cannot b	
Carbon m Nitrogen o Under cer Hydrogen SECTIO	nonoxide a oxides (NC rtain fire co o cyanide (N 11: T C	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) DXICOlOGICAL inform	heating or in case of f er toxic gases cannot b nation	
Carbon m Nitrogen o Under cer Hydrogen SECTIO	nonoxide a oxides (NC rtain fire co cyanide (N 11: To rmation o	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid)	heating or in case of f er toxic gases cannot b nation	
Carbon m Nitrogen o Under cer Hydrogen SECTIO · 11.1 Infor	onoxide a oxides (NC rtain fire co cyanide (N 11: To rmation o cicity	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) DXICOlOGICAL inform	heating or in case of f er toxic gases cannot b nation	
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50	N 11: To rmation o kicity inhaled. values re	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects	heating or in case of f er toxic gases cannot b nation	e excluded, e.g.:
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50 CAS: 901	onoxide a oxides (NC rtain fire co cyanide (N 11: To mation o cicity inhaled. values re 6-87-9 di	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects levant for classification	heating or in case of f er toxic gases cannot b nation	e excluded, e.g.:
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50 CAS: 901 Oral	N 11: To rmation o cicity inhaled. values re 6-87-9 dij	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects levant for classification ohenylmethanediisocy >10,000 mg/kg (rat)	heating or in case of f er toxic gases cannot b nation s on: vanate, isomers and h	e excluded, e.g.:
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50 CAS: 901 Oral Dermal	onoxide a oxides (NC rtain fire co cyanide (PN 11: To rmation o cicity inhaled. values re 6-87-9 dij LD50 LD50	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects levant for classificatio ohenylmethanediisocy >10,000 mg/kg (rat) >10,000 mg/kg (rabbi	heating or in case of f er toxic gases cannot b nation s on: vanate, isomers and h	e excluded, e.g.:
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50 CAS: 901 Oral Dermal Inhalative	Nonoxide a oxides (NC rtain fire co o cyanide (N 11: To rmation o cicity inhaled. values re 6-87-9 dij LD50 LD50 LC50/4 h	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects levant for classificatio ohenylmethanediisocy >10,000 mg/kg (rat) >10,000 mg/kg (rabbi n 1.5 mg/L (rat)	heating or in case of f er toxic gases cannot b nation s on: vanate, isomers and h	e excluded, e.g.:
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50 CAS: 901 Oral Dermal Inhalative tris(2-chl	onoxide a oxides (NC rtain fire co o cyanide (N 11: To mation o cicity inhaled. values re 6-87-9 dij LD50 LD50 LC50/4 r oro-1-me	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects levant for classificatio ohenylmethanediisocy >10,000 mg/kg (rat) >10,000 mg/kg (rabbi 1.5 mg/L (rat) thylethyl)phosphate	heating or in case of f er toxic gases cannot b nation s on: vanate, isomers and h	e excluded, e.g.:
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50 CAS: 901 Oral Dermal Inhalative tris(2-chl	Nonoxide a oxides (NC rtain fire co cyanide (N 11: To mation o cicity inhaled. values re 6-87-9 dij LD50 LD50 LC50/4 H oro-1-met	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects levant for classificatio ohenylmethanediisocy >10,000 mg/kg (rat) >10,000 mg/kg (rabbi n 1.5 mg/L (rat) thylethyl)phosphate 632 mg/kg (rat)	heating or in case of f er toxic gases cannot b nation s on: vanate, isomers and h	e excluded, e.g.:
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50 CAS: 901 Oral Dermal Inhalative tris(2-chl Oral CAS: 115	N 11: To rtain fire co cyanide (NC cyanide (N 11: To mation o cicity inhaled. values re 6-87-9 dip LD50 LD50 LC50/4 F oro-1-me LD50 S-10-6 dim	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects levant for classificatio ohenylmethanediisocy >10,000 mg/kg (rat) >10,000 mg/kg (rabbi 1.5 mg/L (rat) thylethyl)phosphate 632 mg/kg (rat) ethyl ether	heating or in case of f er toxic gases cannot b nation s on: vanate, isomers and h	e excluded, e.g.:
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50 CAS: 901 Oral Dermal Inhalative tris(2-chl Oral CAS: 115 Inhalative	Nonoxide a boxides (NC rtain fire co cyanide (N 11: To mation o cicity inhaled. values re 6-87-9 dij LD50 LD50 LC50/4 H oro-1-me LD50 -10-6 dim LC50/4 H	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects levant for classificatio ohenylmethanediisocy >10,000 mg/kg (rat) >10,000 mg/kg (rabbi 1.5 mg/L (rat) thylethyl)phosphate 632 mg/kg (rat) ethyl ether n 308 mg/L (rat)	heating or in case of f er toxic gases cannot b nation s on: /anate, isomers and l	homologues
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50 CAS: 901 Oral Dermal Inhalative tris(2-chl Oral CAS: 115 Inhalative	Nonoxide a boxides (NC rtain fire co cyanide (N 11: To mation o cicity inhaled. values re 6-87-9 dij LD50 LD50 LC50/4 H oro-1-me LD50 -10-6 dim LC50/4 H	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects levant for classificatio ohenylmethanediisocy >10,000 mg/kg (rat) >10,000 mg/kg (rabbi 1.5 mg/L (rat) thylethyl)phosphate 632 mg/kg (rat) ethyl ether	heating or in case of f er toxic gases cannot b nation s on: /anate, isomers and l	homologues
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50 CAS: 901 Oral Dermal Inhalative tris(2-chl Oral CAS: 115 Inhalative	Nonoxide a boxides (NC rtain fire co cyanide (N 11: To mation o cicity inhaled. values re 6-87-9 dij LD50 LD50 LC50/4 H oro-1-me LD50 -10-6 dim LC50/4 H	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects levant for classificatio ohenylmethanediisocy >10,000 mg/kg (rat) >10,000 mg/kg (rabbi 1.5 mg/L (rat) thylethyl)phosphate 632 mg/kg (rat) ethyl ether n 308 mg/L (rat)	heating or in case of f er toxic gases cannot b nation s on: /anate, isomers and l	homologues
Carbon m Nitrogen o Under cer Hydrogen SECTIO • 11.1 Infor • Acute tox Harmful if • LD/LC50 CAS: 901 Oral Dermal Inhalative tris(2-chl Oral CAS: 115 Inhalative CAS: 364	N 11: To rtain fire co cyanide (NC N 11: To N 11: To Mathematical N 10: N 11: To Mathematical N 10: N 10: N 10: N 10: N 10: N 10: N 10: N 10: N 10: N 10: N 10	ases is possible during nd carbon dioxide Dx) onditions, traces of othe prussic acid) oxicological inform n toxicological effects levant for classificatio ohenylmethanediisocy >10,000 mg/kg (rat) >10,000 mg/kg (rabbi 1.5 mg/L (rat) thylethyl)phosphate 632 mg/kg (rat) ethyl ether 308 mg/L (rat) ,2-dimethylpropan-1-o	heating or in case of f er toxic gases cannot b nation s on: /anate, isomers and l	homologues



(Contd. of page 8)

Revision: 26.03.2019

Printing date 01.04.2019

Trada nome, Nullifire EE107

Version number 7

	Trade name: Nullifire FF197
ſ	(
	· Primary irritant effect:
	· Skin corrosion/irritation
	Causes skin irritation.
	 Serious eye damage/irritation
	Causes serious eye irritation.
	 Respiratory or skin sensitisation
	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
	· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
	• Germ cell mutagenicity Based on available data, the classification criteria are not met.
	· Carcinogenicity
	Suspected of causing cancer.
	• Reproductive toxicity Based on available data, the classification criteria are not met.
	· STOT-single exposure
	May cause respiratory irritation.
	· STOT-repeated exposure
	May cause damage to organs through prolonged or repeated exposure.
	• Aspiration hazard Based on available data, the classification criteria are not met.
*	SECTION 12: Ecological information
	· 12.1 Toxicity
	· Aquatic toxicity:
	CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues
	LC0/96 h >1,000 mg/L (brachydanio rerio)
	ECE0/24 h > 1.000 mg/L (dephasin megane)

EC50/24 h >1,000 mg/L (daphnia magna)

tris(2-chloro-1-methylethyl)phosphate

LC50/96 h 51 mg/L (pimephales promelas)

CAS: 36483-57-5 2,2-dimethylpropan-1-ol, tribromo derivative

LC50/96 h 32 mg/L (cyprinus caprio)

EC50/48 h 64 mg/L (daphnia magna)

EC50/72 h |>100 mg/L (scenedesmus capricornutum)

• 12.2 Persistence and degradability No further relevant information available.

· Other information: The product is not easily biodegradable.

· 12.3 Bioaccumulative potential No further relevant information available.

• 12.4 Mobility in soil No further relevant information available.

· Ecotoxical effects:

CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

NOEC/21 d >10 mg/L (daphnia magna)

CAS: 36483-57-5 2,2-dimethylpropan-1-ol, tribromo derivative

NOEC 5.6 mg/L (cyprinus caprio)

· Other information:

This product contains no substances in Annex I to Directive EC 1005/2009 concerning ozone depleting substances

(Contd. on page 10)



Revision: 26.03.2019

Printing date 01.04.2019

Version number 7

Trade name: Nullifire FF197

(Contd. of page 9)

· Additional ecological informa	ation:
---------------------------------	--------

· General notes:

Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- **vPvB:** Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Cured product can be deposited together with domestic waste. Observe the specific related regulations of local authorities.

This material and its container must be disposed of as hazardous waste.

Do not allow product to reach sewage system or any water course.

Do not pierce or burn, even after use.

· European waste catalogue

· Uncleaned packaging:

· Recommendation:

Packagings that may not be cleansed are to be disposed of in the same manner as the product. Dispose of packaging according to regulations on the disposal of packagings.

SECTION 14: Transport information		
· 14.1 UN-Number · ADR, IMDG, IATA	UN1950	
· 14.2 UN proper shipping name		
ADR	1950 AEROSOLS	
·IMDG	AEROSOLS	
· IATA	AEROSOLS, flammable	
		(Contd. on page 1



Revision: 26.03.2019

Printing date 01.04.2019

Trade name: Nullifire FF197

Version number 7

	(Contd. of page	
14.3 Transport hazard class(es)		
ADR		
$\mathbf{\vee}$		
Class	2 5F Gases.	
Label	2.1	
IMDG, IATA		
2		
Class	2.1	
Class Label	2.1 2.1	
	2.1	
14.4 Packing group	Void	
ADR, IMDG, IATA	Void	
14.5 Environmental hazards:		
Marine pollutant:	No	
14.6 Special precautions for user	Warning: Gases.	
Danger code (Kemler):	-	
EMS Number:	F-D,S-U	
Stowage Code	SW1 Protected from sources of heat.	
	SW22 For AEROSOLS with a maximum capac of 1 litre: Category A. For AEROSOLS with	
	capacity above 1 litre: Category B. For WAS	
	AEROSOLS: Category C, Clear of living quarters	
Segregation Code	SG69 For AEROSOLS with a maximum capacity	
	1 litre: Segregation as for class 9. Stow "separat	
	from class 1 except for division 1.4. F	
	AEROSOLS with a capacity above 1 litr	
	Segregation as for the appropriate subdivision class 2. For WASTE AEROSOLS: Segregation	
	for the appropriate subdivision of class 2.	
14.7 Transport in bulk according to An		
Marpol and the IBC Code	Not applicable.	
•		
Transport/Additional information:		
ADR		
Limited quantities (LQ)	1L	
Excepted quantities (EQ)	Code: E0	
Transport category	Not permitted as Excepted Quantity 2	
Tunnel restriction code	D	



Revision: 26.03.2019

150.000 t

500.000 t

Printing date 01.04.2019

Version number 7

Trade name:	Nullifire	FF197

(Contd. of page 11)

·IMDG		
 Limited quantities (LQ) 	1L	
 Excepted quantities (EQ) 	Code: E0	
	Not permitted as Excepted Quantity	
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1	
SECTION 15: Regulatory information		
\cdot 15.1 Safety, health and environme	ental regulations/legislation specific for the substance	
mixture	/• · · · · · · · · · · · · · · · · · · ·	
"CLD" Dogulation (EC) No 1272/2009	$(\Omega 1 353 31 12 2008 n 1)$	
"CLP" Regulation (EC) No 1272/2008		
"REACH" Regulation (EC) No 1907/20	06 (OJ L 396, 30.12.2006, p.1, with subsequent amendments)	
	06 (OJ L 396, 30.12.2006, p.1, with subsequent amendments)	

HSE EH40/2005 Workplace Exposure Limits (as amended) Guidance on the classification and assessment of waste | Technical Guidance WM3 (1st edition 2015) 2001/118/EC as regards the list of wastes 2008/98/EC on waste

- · Directive 2012/18/EU
- · Qualifying quantity (tonnes) for the application of lower-tier requirements
- · Qualifying quantity (tonnes) for the application of upper-tier requirements
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · National regulations:
- · Information about limitation of use:

Employment restrictions concerning juveniles must be observed. Employment restrictions concerning pregnant and lactating women must be observed.

· Other regulations, limitations and prohibitive regulations

- · Substances of very high concern (SVHC) according to REACH, Article 57 Not applicable.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

- H220 Extremely flammable gas.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

(Contd. on page 13)

GB



Revision: 26.03.2019

Printing date 01.04.2019

Version number 7

	(Contd. of page 1
Department issuing SDS:	
• •	"REACH" Regulation (EC) No 1907/2006, Annex II, Part A
0.2.3.	······································
Previous Revision Date: 13-04-2011 (Uk	$\langle \rangle$
Abbreviations and acronyms:	A Contraction of the second seco
	handises dangereuses par Route (European Agreement concerning t
International Carriage of Dangerous Goods by Roa	d)
IMDG: International Maritime Code for Dangerous (
IATA: International Air Transport Association	
GHS: Globally Harmonised System of Classification	n and Labelling of Chemicals
EINECS: European Inventory of Existing Commerci	
ELINCS: European List of Notified Chemical Substa	ances
CAS: Chemical Abstracts Service (division of the A	merican Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)	
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent	
LD50: Lethal dose, 50 percent	
PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern	
vPvB: very Persistent and very Bioaccumulative	
Flam. Gas 1: Flammable gases – Category 1	
Aerosol 1: Aerosols – Category 1	
Press. Gas (Comp.): Gases under pressure – Com	pressed gas
Acute Tox. 4: Acute toxicity – Category 4	3
Skin Irrit. 2: Skin corrosion/irritation – Category 2	
Eye Irrit. 2: Serious eye damage/eye irritation - Cat	
Resp. Sens. 1: Respiratory sensitisation – Category	y 1
Skin Sens. 1: Skin sensitisation – Category 1	
Carc. 2: Carcinogenicity – Category 2	
STOT SE 3: Specific target organ toxicity (single ex	
STOT RE 2: Specific target organ toxicity (repeated	
* Data compared to the previous versio	n altered.