

Annex to the extended Safety Data Sheet (eSDS)

Version:1.0

Annex for Ethyl 2-cyanoacrylate**Content**

Exposure Scenario 1)	Adhesives and sealants industrial use
Exposure Scenario 2)	Adhesives and sealants professional use

Exposure Scenario III.**Adhesives and sealants industrial use****I.1 List of use descriptors**

Sector(s) of Use	<p>SU3: Industrial uses: Uses of substances as such or in preparations at industrial sites</p> <p>SU4: Manufacture of food products</p> <p>SU5: Manufacture of textiles, leather, fur</p> <p>SU6a: Manufacture of wood and wood products</p> <p>SU6b: Manufacture of pulp, paper and paper products</p> <p>SU7: Printing and reproduction of recorded media</p> <p>SU9: Manufacture of fine chemicals</p> <p>SU11: Manufacture of rubber products</p> <p>SU12: Manufacture of plastics products, including compounding and conversion</p> <p>SU15: Manufacture of fabricated metal products, except machinery and equipment</p> <p>SU16: Manufacture of computer, electronic and optical products, electrical equipment</p> <p>SU17: General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment</p> <p>SU18: Manufacture of furniture</p> <p>SU19: Building and construction work</p> <p>SU20: Health services</p>
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Product categories [PC]:	not relevant.
Name of contributing environmental scenario and corresponding ERC:	<p>ERC5: Industrial use resulting in inclusion into or onto a matrix</p> <p>ERC8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix</p> <p>ERC8e: Wide dispersive outdoor use of reactive substances in open systems</p>
List of names of contributing worker scenarios and corresponding PROCs:	<p>PROC2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC3: Use in closed batch process (synthesis or formulation)</p> <p>PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)</p> <p>PROC7: Industrial spraying</p> <p>PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>PROC10: Roller application or brushing</p> <p>PROC13: Treatment of articles by dipping and pouring</p> <p>PROC14: Production of preparations or articles by tableting, compression, extrusion, pelettisation</p>

I.2.1 Contributing exposure scenario controlling environmental exposure

Environmental Release Categories [ERC]:	<p>ERC5: Industrial use resulting in inclusion into or onto a matrix</p> <p>ERC8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix</p> <p>ERC8e: Wide dispersive outdoor use of reactive substances in open systems</p>
not applicable	

I.2.2 Contributing exposure scenario controlling worker exposure

Process Categories:	<p>PROC2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC3: Use in closed batch process (synthesis or formulation)</p> <p>PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)</p> <p>PROC7: Industrial spraying</p> <p>PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>PROC10: Roller application or brushing</p> <p>PROC13: Treatment of articles by dipping and pouring</p> <p>PROC14: Production of preparations or articles by tableting, compression, extrusion, pelettisation</p>
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Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 % (unless stated differently).
Physical form of the product:	liquid
Vapour pressure:	< 21 Pa
Process temperature:	21 °C

Amounts used

not relevant

Frequency and duration of use

	Use duration:	Frequency of use:	Remarks
Hours per shift	0,25 - 8 h	daily	

Other given operational conditions affecting workers exposure

Area of use	room size:	temperature:	Ventilation rate	Remarks
Indoor use.	not relevant.	21 °C	not relevant.	

Risk management measures (RMM)**Technical conditions and measures at process level (source) to prevent release**

See chapter 7 of the safety data sheet

Technical conditions and measures to control dispersion from source towards the worker

Industrial:	with local exhaust ventilation Effectiveness: 90 %.
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Conditions and measures related to personal protection, hygiene and health evaluation

Industrial:	Wear face protective shield. Effectiveness: 75 %.
	Wear suitable gloves. Effectiveness: 90 %.
	Self-contained respirator (breathing apparatus) (DIN EN 133) Effectiveness: 90 %.

See chapter 8 of the safety data sheet (Personal protection equipment)

I.3 Exposure Estimation**Environment:**

none

Health:**Adhesives and sealants industrial use:****PROC2: Use in closed, continuous process with occasional controlled exposure:**

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,06	ECETOC TRA	> 4 hours with local exhaust ventilation
inhalation	< 1,8 ppm	0,135	ECETOC TRA	15 min - 1 hour Without local exhaust ventilation

PROC3: Use in closed batch process (synthesis or formulation):

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,18	ECETOC TRA	> 4 hours with local exhaust ventilation
inhalation	< 1,8 ppm	0,361	ECETOC TRA	15 min - 1 hour Without local exhaust ventilation

PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact):

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,30	ECETOC TRA	> 4 hours with local exhaust ventilation
inhalation	< 1,8 ppm	0,753	ECETOC TRA	15 min - 1 hour Without local exhaust ventilation

PROC7: Industrial spraying:

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,323	ECETOC TRA	> 4 hours with local exhaust ventilation

PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities:

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,6	ECETOC TRA	> 4 hours with local exhaust ventilation
inhalation	< 1,8 ppm	0,753	ECETOC TRA	15 min - 1 hour Without local exhaust ventilation

PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities:

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,09	ECETOC TRA	> 4 hours with local exhaust ventilation
inhalation	< 1,8 ppm	0,675	ECETOC TRA	15 min - 1 hour Without local exhaust ventilation

PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing):

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,3	ECETOC TRA	> 4 hours with local exhaust ventilation
inhalation	< 1,8 ppm	0,675	ECETOC TRA	15 min - 1 hour Without local exhaust ventilation

PROC10: Roller application or brushing:

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,6	ECETOC TRA	> 4 hours with local exhaust ventilation
inhalation	< 1,8 ppm	0,911	ECETOC TRA	15 min - 1 hour Without local exhaust ventilation

PROC13: Treatment of articles by dipping and pouring:

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,6	ECETOC TRA	> 4 hours with local exhaust ventilation
inhalation	< 1,8 ppm	0,753	ECETOC TRA	15 min - 1 hour Without local exhaust ventilation

PROC14: Production of preparations or articles by tableting, compression, extrusion, pelettisation:

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,34	ECETOC TRA	> 4 hours with local exhaust ventilation
inhalation	< 1,8 ppm	0,635	ECETOC TRA	15 min - 1 hour Without local exhaust ventilation

I.4 Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

For further information, please also consult our Internet site: Downstream Users
http://guidance.echa.europa.eu/downstream_users_en.htm

Exposure Scenario IV.**Adhesives and sealants professional use****II.1 List of use descriptors**

Sector(s) of Use	SU22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen) SU19: Building and construction work
Product categories [PC]:	not relevant.
Name of contributing environmental scenario and corresponding ERC:	ERC8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC8e: Wide dispersive outdoor use of reactive substances in open systems
List of names of contributing worker scenarios and corresponding PROCs:	PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC10: Roller application or brushing PROC13: Treatment of articles by dipping and pouring PROC19: Hand-mixing with intimate contact and only PPE available

II.2.1 Contributing exposure scenario controlling environmental exposure

Environmental Release Categories [ERC]:	ERC8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC8e: Wide dispersive outdoor use of reactive substances in open systems
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not applicable

II.2.2 Contributing exposure scenario controlling worker exposure

Process Categories:	PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC10: Roller application or brushing PROC13: Treatment of articles by dipping and pouring PROC19: Hand-mixing with intimate contact and only PPE available
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Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 % (unless stated differently).
Physical form of the product:	liquid
Vapour pressure:	< 21 Pa
Process temperature:	21 °C

Amounts used

not relevant

Frequency and duration of use

	Use duration:	Frequency of use:	Remarks
Hours per shift	0,25 - 8 h	daily	

Other given operational conditions affecting workers exposure

Area of use	room size:	temperature:	Ventilation rate	Remarks
Indoor use.	not relevant.	21 °C	not relevant.	

Risk management measures (RMM)**Technical conditions and measures at process level (source) to prevent release**

See chapter 7 of the safety data sheet

Technical conditions and measures to control dispersion from source towards the worker

Professional:	with local exhaust ventilation Effectiveness: 80 %.
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Conditions and measures related to personal protection, hygiene and health evaluation

Professional:	Wear face protective shield. Effectiveness: 75 %.
	Wear suitable gloves. Effectiveness: 90 %.
	Self-contained respirator (breathing apparatus) (DIN EN 133) Effectiveness: 90 %.

See chapter 8 of the safety data sheet (Personal protection equipment)

II.3 Exposure Estimation**Environment:**

none

Health:**Adhesives and sealants professional use:****PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities:**

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,6	ECETOC TRA	with local exhaust ventilation 15 min - 1 hour

PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities:

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,12	ECETOC TRA	with local exhaust ventilation 15 min - 1 hour

PROC10: Roller application or brushing:

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,3	ECETOC TRA	> 4 hours with local exhaust ventilation
inhalation	< 1,8 ppm	0,6	ECETOC TRA	No respiratory protection 15 min - 1 hour with local exhaust ventilation

PROC13: Treatment of articles by dipping and pouring:

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,127	ECETOC TRA	> 4 hours with local exhaust ventilation
inhalation	< 1,8 ppm	0,6	ECETOC TRA	> 4 hours with local exhaust ventilation No respiratory protection

PROC19: Hand-mixing with intimate contact and only PPE available:

	Exposure level	RCR	Method	Remarks
inhalation	< 1,8 ppm	0,6	ECETOC TRA	15 min - 1 hour with local exhaust ventilation No respiratory protection

II.4 Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

For further information, please also consult our Internet site: Downstream Users
http://guidance.echa.europa.eu/downstream_users_en.htm