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

1.1 Product identifier

Trade name	:	Acetone, Borvida B™ Acetone, Borvida C™ Acetone
11	:	01-2119471330-49-0006, 01-2119471330-49-XXXX
Substance name	:	Acetone
Index-No.	:	606-001-00-8
EC-No.	:	200-662-2

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

Use of the : Substance/Mixture	Manufacture, Formulation, Use in laboratories, Use as an intermediate, Use in coatings, Use in binder and release agents, Use in rubber production and processing, Use in polymer processing, Use in polymer production, Use in cleaning agents, Oil field well drilling and production operations (including drilling muds and well cleaning) within closed or contained systems including incidental exposures during material transfers, on-site and activities and related maintenance., Use in blowing agents, Use in mining chemicals, Use in agrochemicals, Use in de-icing and anti- icing fluids, Use in explosives, Coatings and paints, thinners, paint removers, Fillers, putties, plasters, modelling clay, Heat transfer fluids, Cosmetics, Personal care products, Lubricants,
	greases, release products, Polishes and wax blends

1.3 Details of the supplier of the safety data sheet

Manufacturer	: Borealis Polymers Oy P.O.Box 330, FI-06101 Porvoo, Finland Telephone: +358 9 394900
Supplier	: Borealis AG Trabrennstrasse 6-8, 1020 Vienna, Austria Telephone: +43 1 22400 0
E-mail address	: <u>sds@borealisgroup.com</u>

1.4 Emergency telephone number

Borvida B and Borvida C are trademarks of the Borealis group.



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+1 760 476 3962 (3E), Access code: 336296

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2	H225: Highly flammable liquid and vapour.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) Hazard pictograms Signal word Danger Hazard statements H225 Highly flammable liquid and vapour. • Causes serious eye irritation. H319 H336 May cause drowsiness or dizziness. Supplemental Hazard : EUH066 Repeated exposure may cause skin Statements dryness or cracking. **Prevention:** Precautionary statements : P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 Take precautionary measures against static discharge. **Response:** P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.



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2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name	:	Acetone
Index-No.	:	606-001-00-8
EC-No.	:	200-662-2

Components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)	M-Factor, SCL, ATE
acetone	67-64-1 200-662-2	> 99	

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	 Move the victim to fresh air. Keep patient warm and at rest. If unconscious, place in recovery position and seek medical advice.
If inhaled	: Remove from exposure. Keep warm and at rest and provide fresh air. Give oxygen or artificial respiration if needed.



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	Seek medical advice immediatel	у.
In case of skin contact	: Take off all contaminated clothin Wash off immediately with soap Obtain medical attention.	
In case of eye contact	: Rinse immediately with plenty of for at least 10 minutes. Seek medical advice immediatel	
If swallowed	: Seek medical advice immediatel Do NOT induce vomiting. Rinse mouth, ingest activated ch	-
4.2 Most important symptoms	s and effects, both acute and delayed	
Symptoms	: Skin and eye contact: tingling	
	Inhalation may provoke the follow Respiratory irritation	wing symptoms:
	Inhalation of high vapour concen symptoms like headache, dizzine vomiting.	
	Ingestion may provoke the follow Gastrointestinal discomfort	ving symptoms:
	Skin contact: Repeated exposure may cause s	skin dryness or cracking.
Risks	 Causes serious eye irritation. May cause drowsiness or dizzine Repeated exposure may cause s 	
4.3 Indication of any immedia	te medical attention and special treat	
Treatment	 Symptoms of poisoning may not Keep under medical supervision Artificial respiration and/or oxyge Risk of delayed pulmonary oede 	for at least 48 hours. In may be necessary.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : A

: Alcohol-resistant foam Dry powder



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	Water mist Carbon dioxide (CO2)		
5.2 Special hazards arising from	the substance or mixture		
Specific hazards during firefighting	 Incomplete combustion may produce: Carbon monoxide Carbon dioxide (CO2) Vapours may form explosive mixtures with air. 		
5.3 Advice for firefighters			
Special protective equipment for firefighters	: Wear self-contained breathing app Complete suit protecting against c protective clothing	•	
Further information	: Remove all sources of ignition. Cool containers/tanks with water s Do not allow run-off from fire fighti courses.		

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Eliminate all ignition sources if safe to do so. Keep people away from and upwind of spill/leak. Use personal protective equipment.

6.2 Environmental precautions

Attempt to stop leakage without personal risk. Should not be released into the environment. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Observe the risk of explosion.

6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation, especially in confined areas.

Clean-up methods - large spillage Dam up. Large spills should be collected mechanically (remove by pumping) for disposal.

Clean-up methods - small spillage Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local /



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national regulations (see section 13).

Non-sparking tools should be used. Vapours are heavier than air and may spread along floors. Pay attention to flashback. The product evaporates readily.

6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Adv	rice on safe handling :	PRACAAV PVE	Ensure adequate ventilation. Provide exhaust ventilation close to floor level. Refill and handle product only in closed system. Avoid formation of aerosol. Do not breathe vapours/dust. Avoid contact with skin, eyes and clothing. Avoid exposure - obtain special instructions before use. Vash hands before breaks and immediately after handling the roduct. When using do not eat, drink or smoke. Ensure that eyewash stations and safety showers are close to he workstation location.
	rice on protection against : and explosion	T a	Keep away from heat and sources of ignition. No smoking. Take precautionary measures against static discharges. To void ignition of vapours by static electricity discharge, all netal parts of the equipment must be grounded.
7.2 Cond	ditions for safe storage, incl	luc	ling any incompatibilities
	quirements for storage : as and containers	k e	Keep containers tightly closed in a cool, well-ventilated place. Keep in a dry place. Protect from sunlight. Keep product and empty container away from heat and sources of ignition. Locate bulk storage outdoors.
Adv	vice on common storage :		Keep away from incompatible materials. See chapter 10.

7.3 Specific end use(s)

Specific use(s)

: Solvent



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis			
acetone	67-64-1	TWA	500 ppm 1.210 mg/m3	2000/39/EC			
Further information	Indicative						
		OELV - 8 hrs (TWA)	500 ppm 1.210 mg/m3	IE OEL			
Further information	Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit value should be used, Indicative Occupational Exposure Limit Value						

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
acetone	Workers	Inhalation	Acute local effects	2420 mg/m3
	Workers	Inhalation	Long-term systemic effects	1210 mg/m3
	Workers	Skin contact	Long-term systemic effects	186 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	200 mg/m3
	Consumers	Skin contact	Long-term systemic effects	62 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	62 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
acetone	Fresh water	10,6 mg/l
	Intermittent use/release	21 mg/l
	Marine water	1,06 mg/l
	Fresh water sediment	30,4 mg/kg
	Marine sediment	3,04 mg/kg
	Soil	29,5 mg/kg
	Sewage treatment plant	100 mg/l
	Fresh water	10,6 mg/l
	Intermittent use/release	21 mg/l
	Marine water	1,06 mg/l
	Fresh water sediment	30,4 mg/kg
	Marine sediment	3,04 mg/kg



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	Soil Sewage treatment plant	29,5 mg/kg 100 mg/l
Exposure controls		
Engineering measures		
Use only explosion-proof eq Provide adequate ventilation		
Personal protective equip	nent	
Eye protection	: Safety glasses with side-shie	elds conforming to EN166
Hand protection Material Break through time Glove thickness	: butyl-rubber : > 240 min : 0,5 mm	
Remarks	breakthrough time which are gloves. Also take into consid conditions under which the p danger of cuts, abrasion, and protective gloves have to sat	ons regarding permeability and e provided by the supplier of the leration the specific local product is used, such as the d the contact time. The selected
Skin and body protection	: Use solvent-resistant protect Flame retardant protective c Safety shoes according to E	lothing
Respiratory protection	: Wear respiratory protection certain contributing scenario	
Filter type	: Organic gas and low boiling	vapour type (AX)
Environmental exposure of	ontrols	
General advice	: Attempt to stop leakage with released into the environmend drains. Local authorities sho	out personal risk. Should not be nt. Prevent product from entering uld be advised if significant ed. Observe the risk of explosion.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid



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Colour	:	colourless	
Odour	:	sweet, aromatic	
Odour Threshold	:	19,8 ppm	
Melting point	:	-94,7 °C	
Boiling point	:	56 °C	
Flammability	:	Highly flammable.	
Upper explosion limit / Upper flammability limit	:	14,3 %(V)	
Lower explosion limit / Lower flammability limit	:	2,5 %(V)	
Flash point	:	-17 °C	
Auto-ignition temperature	:	465 °C	
Decomposition temperature	:	No data available	
рН	:	7 Concentration: 10 g/l	
Viscosity Viscosity, dynamic	:	0,32 mPa.s (20 °C)	
Solubility(ies) Water solubility	:	completely soluble	
Solubility in other solvents	:	miscible with most organic solvents (20 °C) Solvent: Fat solubility	
Partition coefficient: n- octanol/water	:	log Pow: -0,24	
Vapour pressure	:	240 hPa (20 °C)	
		800 hPa (50 °C)	
Relative density	:	0,79 (20 °C)	
Density	:	0,79 g/cm³	



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Relative vapour density	: 2,1 (20 °C)	
Particle size	: Not applicable, (liquid)	
Particle characteristics Particle Size Distribution	: Not applicable, (liquid)	
9.2 Other information		
Explosives	: Not explosive	
Oxidizing properties	: The substance or mixture is not classifie	d as oxidizing.
Evaporation rate	: 2,0 (ether = 1)	
Molecular weight	: 58,08 g/mol	

SECTION 10: Stability and reactivity

10.1 Reactivity

Reacts with the following substances: Bases

10.2 Chemical stability

Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors. Pay attention to flashback.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid	:	Keep away from heat and sources of ignition.
		Exposure to light.

10.5 Incompatible materials Materials to avoid

: May attack many plastics, rubbers and coatings. Keep away from: Bases Oxidizing agents Amines



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10.6 Hazardous decomposition products

Carbon monoxide Carbon dioxide (CO2)

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

Components:	
acetone: Acute oral toxicity	: LD50 (Rat): 5.800 mg/kg
Acute inhalation toxicity	: LC50: 76 mg/l Test atmosphere: vapour
Acute dermal toxicity	: LD50 (Guinea pig, male): > 7.426 mg/kg

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Components:

acetone:		
Species	:	Guinea pig
Remarks	:	No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

acetone:	
Species	: Rabbit
Method	: OECD Test Guideline 405
Remarks	: slight irritation

Respiratory or skin sensitisation

Skin sensitisation

Based on available data, the classification criteria are not met.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Components:



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acetone: Test Type Exposure routes Species Remarks	 Maximisation Test Skin contact Guinea pig Does not cause skin sensitisation. 	
Germ cell mutagenicity		
	the classification criteria are not met.	
Components:		
acetone: Genotoxicity in vitro	: Test Type: gene mutation test Method: OECD Test Guideline 47 Result: negative	1
	: Test Type: In vitro gene mutation : Method: OECD Test Guideline 470 Result: negative	
	: Test Type: Chromosome aberration Method: OECD Test Guideline 473 Result: negative	
Genotoxicity in vivo	: Test Type: in vivo assay Species: Mouse Application Route: Oral Result: negative	
Carcinogenicity		
Based on available data,	the classification criteria are not met.	
Components:		
acetone: Species Application Route Exposure time Remarks	: Mouse, female : Dermal : 1 yr : negative	
Reproductive toxicity	the electric subscription of the state of th	
	the classification criteria are not met.	
Components:		
acetone: Effects on fertility	: Remarks: study scientifically unjus	stified
Effects on foetal development	: Application Route: Inhalation General Toxicity Maternal: NOAE	C: 5.300 mg/m³



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STOT - single exposure

May cause drowsiness or dizziness.

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Repeated dose toxicity

Components:

acetone:		
Species	:	Rat, male
NOAEL	:	900 mg/kg
Application Route	:	Oral
Exposure time	:	90 d
Method	:	OECD Test Guideline 408
Species Application Route Exposure time	:	Rat, male Inhalation 40 d

Aspiration toxicity

Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Further information

Product:

Remarks

May be absorbed into the body by inhalation and through the skin.
 Effects due to ingestion may include:
 Gastrointestinal disturbance



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SECTION 12: Ecological information

12.1 Toxi	icity		
Proc	luct:		
	oxicology Assessment		
Long haza	g-term (chronic) aquatic Ird	:	This product has no known ecotoxicological effects.
Com	ponents:		
acet Toxio	one: city to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 5.540 mg/l Exposure time: 96 h Test Type: static test Remarks: Fresh water
			LC50 (bleak (Alburnus alburnus)): 11.000 mg/l Exposure time: 96 h Test Type: static test Remarks: Marine water
	city to daphnia and other tic invertebrates	:	LC50 (Daphnia pulex (Water flea)): 8.800 mg/l Exposure time: 48 h Test Type: static test Remarks: Fresh water
			LC50 (Artemia salina): 2.100 mg/l Exposure time: 24 h Test Type: static test Remarks: Marine water
Toxic plant	city to algae/aquatic ts	:	NOEC (Microcystis aeruginosa): 530 mg/l Exposure time: 8 d Test Type: static test Remarks: Fresh water
			NOEC (Prorocentrum minimum): 430 mg/l Exposure time: 96 h Remarks: Marine water
Toxi	city to microorganisms	:	EC12 (Bacteria): 1.000 mg/l Exposure time: 30 min Test Type: Respiration inhibition of activated sludge
Toxic	city to fish (Chronic ity)	:	Remarks: study scientifically unjustified



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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 2.212 mg/l Exposure time: 28 d Species: Daphnia magna (Water flea) Test Type: flow-through test Remarks: Fresh water	
12.2 Persistence and degradabili	ity	
Product:		
Stability in water	: Hydrolysis: (0 %)	
Photodegradation	: Test Type: Air Half-life (direct photolysis): 10 d	
<u>Components:</u> acetone: Biodegradability	: Biodegradation: 91 % Method: OECD Test Guideline 301B Remarks: Readily biodegradable.	
	Biodegradation: 84 % Related to: Theoretical oxygen demand	
	Test Type: activated sludge Biodegradation: 100 %	
12.3 Bioaccumulative potential		
Product:		
Bioaccumulation	: Bioconcentration factor (BCF): 3 Method: calculated Remarks: Bioaccumulation not expected (n-octanol/water) log Kow < 3.	d: Partition coefficient
Components: acetone: Partition coefficient: n- octanol/water	: log Pow: -0,24	
12.4 Mobility in soil		
<u>Product:</u> Mobility	: Remarks: Soil, High mobility	



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	Remarks: Water:, The product ev	vaporates readily.
Results of PBT and vPv	B assessment	
Product:		
Assessment	 This substance/mixture contains to be either persistent, bioaccum very persistent and very bioaccur 0.1% or higher 	ulative and toxic (PBT), or
Endocrine disrupting pr	operties	
Product:		
Assessment	: The substance/mixture does not considered to have endocrine dis to REACH Article 57(f) or Commi (EU) 2017/2100 or Commission F levels of 0.1% or higher.	srupting properties according ission Delegated regulation
Other adverse effects		
Product:		
Additional ecological nformation	: The product should not be allowe courses or the soil.	ed to enter drains, water
nformation	courses or the soil.	

SECTION 13: Disposal considerations

13.1 Waste treatment methods		
Product	:	Dispose of as hazardous waste in compliance with local and national regulations. Do not dispose of together with household waste. List of suggested waste codes/waste designations in accordance with the EWC: 07 01 04* (other organic solvents, washing liquids and mother liquors)
Contaminated packaging	:	Dispose of as hazardous waste in compliance with local and national regulations.



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SECTION 14: Transport information

14.1 UN number or ID number		
ADR	:	UN 1090
RID	:	UN 1090
IMDG	:	UN 1090
14.2 UN proper shipping name		
ADR	:	ACETONE
RID	:	ACETONE
IMDG	:	ACETONE
14.3 Transport hazard class(es)		
ADR	:	3
RID	:	3
IMDG	:	3
14.4 Packing group		
ADR Packing group Classification Code Hazard Identification Number Labels Tunnel restriction code	: : : : : : : : : : : : : : : : : : : :	II F1 33 3 (D/E)
RID Packing group Classification Code Hazard Identification Number Labels		II F1 33 3
IMDG Packing group Labels EmS Code	:	ll 3 F-E, S-D
14.5 Environmental hazards		
ADR Environmentally hazardous	:	no
RID Environmentally hazardous	:	no
IMDG		



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Marine pollutant	: no	
14.6 Special precautions for	r user	
Remarks	: SDS: No specific instructions	needed.
	e unpackaged material as it is describe tions may vary by mode of transportatic ations.	5
14.7 Maritime transport in b	ulk according to IMO instruments	
14.7 Maritime transport in b Ship type	ulk according to IMO instruments : N/A	

SECTION 15: Regulatory information

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

REACH - Restrictions on the main the market and use of certain date mixtures and articles (Annex XVI Regulation (EU) 2019/1148 on the explosives precursors	ngerous substances, I)	Conditions of restriction for the following entries should be considered: Number on list 40, 3
This product is regulated by Reg all suspicious transactions, and s disappearances and thefts shoul relevant national contact point., In	ignificant d be reported to the	acetone (ANNEX II)
Seveso III: Directive 2012/18/EU major-accident hazards involving P5a/b/c		t and of the Council on the control of

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information



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EUH066	:	Repeated exposure may cause skin dry	ness or cracking.
Full text of other abbreviation	ons		
2000/39/EC	:	Europe. Commission Directive 2000/39/ list of indicative occupational exposure	0
IE OEL	:	Ireland. List of Chemical Agents and Oc Limit Values - Schedule 1	
2000/39/EC / TWA	:	Limit Value - eight hours	
IE OEL / OELV - 8 hrs (TWA)			ur reference period)
Further information			
Other information	:	Changes since the last version are high This version replaces all previous version	
Issuer	:	Borealis, Group Product Stewardship / I	Vikaela Eriksson.
Sources of key data used to compile the Safety Data Sheet	:	International Chemical Safety Card, Ace (http://www.inchem.org/documents/icsc Environment Guide 71; Environmental p chemicals, Finnish Environment Institute REACH Registration Dossier Acetone. I Consortium, 2022	/icsc/eics0087.htm) properties of e, Helsinki 2000

Disclaimer

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borealis makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of Borealis' products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.



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Annex: Exposure Scenarios

Table of Contents

Identified uses:

Use: Manufacture of substance, Use at industrial sites

Main User Groups Process categories	 SU3: Industrial uses PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC5: Mixing or blending in batch processes PROC8b: Transfer of substance or mixture (charging/discharging) at dedicated facilities PROC15: Use as laboratory reagent PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC28: Manual maintenance (cleaning and repair) of machinery
Environmental Release Categories	machineryERC1: Manufacture of the substance

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-1_Manufacture.pdf

Use: Formulation & (re)packing of substances and mixtures, Formulation or re-packing

Main User Groups Chemical product category	 SU3: Industrial uses PC0: Other PC1: Adhesives, sealants PC3: Air care products PC4: Anti-freeze and de-icing products PC8: Biocidal products PC9a: Coatings and paints, thinners, paint removers PC9b: Fillers, putties, plasters, modelling clay
	PC96: Finger paints



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	PC12: Fertilizers PC15: Non-metal surface t PC21: Laboratory chemica PC24: Lubricants, greases PC27: Plant protection pro PC29: Pharmaceuticals PC30: Photo-chemicals PC31: Polishes and wax bl PC32: Polymer preparatior PC35: Washing and cleani PC38: Welding and solderi PC39: Cosmetics, persona	Ils , release products ducts lends ns and compounds ng products ing products, flux products
Process categories	 PROC1: Chemical product without likelihood of expose containment conditions PROC2: Chemical product process with occasional co equivalent containment cor PROC5: Mixing or blending PROC8b: Transfer of subs (charging/discharging) at d PROC15: Use as laborator PROC8a: Transfer of subs (charging/discharging) at n 	ion or refinery in closed process ure or processes with equivalent ion or refinery in closed continuous introlled exposure or processes with nditions g in batch processes stance or mixture edicated facilities ry reagent tance or mixture
Environmental Release Categorie	es : ERC2: Formulation into mi	xture

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-2-Formulation-or-repacking_distribution.pdf

Use: Use as an intermediate, Use at industrial sites		
Main User Groups Sectors of end-use	 SU3: Industrial uses SU8, SU9: Manufacture of bulk, large scale chemicals 	
Chemical product category	(including petroleum products), Manufacture of fine chemicals PC0: Other	
	PC21: Laboratory chemicals	
	PC29: Pharmaceuticals PC30: Photo-chemicals	
	PC35: Washing and cleaning products	
	PC39: Cosmetics, personal care products	



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Process categories		n batch processes ons nce or mixture icated facilities reagent nce or mixture dedicated-facilities

Environmental Release Categories : ERC6a: Use of intermediate

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-3-Use-at-industrial-sites_Use-of-substance-as-intermediate-Z.pdf

Main User Groups	: SU3: Industrial uses
Sectors of end-use	: SU8, SU9: Manufacture of bulk, large scale chemicals (including petroleum products), Manufacture of fine chemicals
Chemical product category	: PC0: Other
1 3 9	PC21: Laboratory chemicals
	PC29: Pharmaceuticals
	PC30: Photo-chemicals
	PC35: Washing and cleaning products
	PC39: Cosmetics, personal care products
Process categories	 PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC5: Mixing or blending in batch processes PROC6: Calendering operations PROC8b: Transfer of substance or mixture (charging/discharging) at dedicated facilities PROC15: Use as laboratory reagent PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC28: Manual maintenance (cleaning and repair) of machinery
Environmental Release Categories	: ERC6a: Use of intermediate

Additional information available from:



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https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-4-Use-at-industrial-sites_Use-of-substance-as-intermediate-A.pdf

Use: Use as an intermediate, Use at industrial sites

Main User Groups Sectors of end-use Chemical product category	 SU3: Industrial uses SU8, SU9: Manufacture of bulk, large scale chemicals (including petroleum products), Manufacture of fine chemicals PC0: Other PC21: Laboratory chemicals PC29: Pharmaceuticals PC30: Photo-chemicals PC35: Washing and cleaning products PC39: Cosmetics, personal care products
Process categories	 PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC5: Mixing or blending in batch processes PROC6: Calendering operations PROC8b: Transfer of substance or mixture (charging/discharging) at dedicated facilities PROC15: Use as laboratory reagent PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC28: Manual maintenance (cleaning and repair) of machinery
Environmental Release Categories	: ERC6a: Use of intermediate

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-5-Use-at-industrial-sites_Use-of-substance-as-intermediate-B.pdf

Use: Use as an intermediate, Use at industrial sites

Main User Groups	: SU3: Industrial uses
Sectors of end-use	: SU8, SU9: Manufacture of bulk, large scale chemicals (including petroleum products), Manufacture of fine chemicals
Chemical product category	 PC0: Other PC21: Laboratory chemicals



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	PC29: Pharmaceuticals PC30: Photo-chemicals PC35: Washing and cleaning PC39: Cosmetics, personal ca	
Process categories	•	batch processes ns ce or mixture cated facilities eagent ce or mixture dedicated-facilities
Environmental Release Catego	ries : ERC6a: Use of intermediate	

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-6-Use-at-industrial-sites_Use-of-substance-as-intermediate-C.pdf

Jse: Solvents, Use at industrial	sites
Main User Groups	: SU3: Industrial uses
Sectors of end-use	: SU6b, SU8, SU9: Manufacture of pulp, paper and paper products, Manufacture of bulk, large scale chemicals (including petroleum products), Manufacture of fine chemicals
Chemical product category	: PC0: Other
	PC8: Biocidal products
	PC21: Laboratory chemicals
	PC26: Paper and board treatment products
	PC27: Plant protection products
	PC29: Pharmaceuticals
	PC30: Photo-chemicals
	PC35: Washing and cleaning products
	PC39: Cosmetics, personal care products
Process categories	: PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
	PROC5: Mixing or blending in batch processes
	PROC8b: Transfer of substance or mixture



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	PROC15 PROC8a (charging	B: Manual maintena	y reagent
Environmental Release	0	Jse of non-reactive into or onto article	processing aid at industrial site (no e)

Additional information available from:

Use: Use in laboratories, Use at industrial sites

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-7-Use-at-industrial-sites_Use-as-solvent-during-synthesis-of-chemicals-processing-not-covered-otherwise.pdf

Main User Groups	: SU3: Industrial uses
Sectors of end-use	: SU8, SU9, SU24: Manufacture of bulk, large scale chemicals (including petroleum products), Manufacture of fine chemicals
	Scientific research and development
Chemical product category	: PC0: Other
g,	PC1: Adhesives, sealants
	PC3: Air care products
	PC4: Anti-freeze and de-icing products
	PC8: Biocidal products
	PC9a: Coatings and paints, thinners, paint removers
	PC9b: Fillers, putties, plasters, modelling clay
	PC9c: Finger paints
	PC12: Fertilizers
	PC15: Non-metal surface treatment products
	PC21: Laboratory chemicals
	PC24: Lubricants, greases, release products
	PC27: Plant protection products
	PC29: Pharmaceuticals
	PC30: Photo-chemicals
	PC31: Polishes and wax blends
	PC32: Polymer preparations and compounds
	PC35: Washing and cleaning products
	PC38: Welding and soldering products, flux products
	PC39: Cosmetics, personal care products
	PC40: Extraction agents
Process categories	: PROC10: Roller application or brushing
-	PROC15: Use as laboratory reagent
	PROC19: Manual activities involving hand contact
	PROC8a: Transfer of substance or mixture
	(charging/discharging) at non dedicated-facilities



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	PROC28: Manual maintenan machinery	ce (cleaning and repair) of
Environmental Release C	ategories : ERC4: Use of non-reactive p inclusion into or onto article)	rocessing aid at industrial site (no

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-8-Use-at-industrial-sites_Use-in-laboratories.pdf

Use: Use in coatings, Use at industrial sites

Main User Groups Sectors of end-use	SU3: Industrial uses SU0, SU15, SU16, SU17, SU18: Other, Manufacture of fabricated metal products, except machinery and equipment, Manufacture of computer, electronic and optical products, electrical equipment, General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment, Manufacture of furniture
Chemical product category :	PC1: Adhesives, sealants PC9a: Coatings and paints, thinners, paint removers PC9b: Fillers, putties, plasters, modelling clay PC9c: Finger paints
Process categories	 PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4: Chemical production where opportunity for exposure arises PROC5: Mixing or blending in batch processes PROC7: Industrial spraying PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC9: Transfer of substance or mixture (charging/discharging) at dedicated facilities PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC10: Roller application or brushing PROC13: Treatment of articles by dipping and pouring PROC14: Tabletting, compression, extrusion, pelettisation, granulation



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Use: Use in binder and release agents, Use at industrial sites

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	PROC15: Use as laboratory reage PROC19: Manual activities involvir PROC28: Manual maintenance (cle machinery	ng hand contact
Environmental Release Categories	ERC4: Use of non-reactive process inclusion into or onto article)	sing aid at industrial site (no
Additional information available from: https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-9-Use-at- industrial-sites_Use-in-coatings_adhesives.pdf		

Main User Groups Process categories	::	 SU3: Industrial uses PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4: Chemical production where opportunity for exposure or processes with equivalent containment condition PROC4: Chemical production where opportunity for exposure arises PROC5: Mixing or blending in batch processes PROC6: Calendering operations PROC7: Industrial spraying PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC10: Roller application or brushing PROC11: Roller application or brushing PROC212: Manual maintenance (cleaning and pouring processe in an an
Environmental Release Categories	:	ERC5: Use at industrial site leading to inclusion into/onto article

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-10-Use-at-industrial-sites_-Use-as-binder-or-release-agent.pdf



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Use: Use in rubber production and processing, Use at industrial sites Main User Groups : SU3: Industrial uses Sectors of end-use : SU11: Manufacture of rubber products Process categories : PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions **PROC2:** Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions **PROC3:** Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition **PROC4:** Chemical production where opportunity for exposure arises PROC5: Mixing or blending in batch processes PROC6: Calendering operations **PROC7:** Industrial spraving PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC8b: Transfer of substance or mixture (charging/discharging) at dedicated facilities **PROC9:** Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC10: Roller application or brushing **PROC13:** Treatment of articles by dipping and pouring **PROC14:** Tabletting, compression, extrusion, pelettisation, granulation PROC28: Manual maintenance (cleaning and repair) of machinery **Environmental Release Categories** : ERC6d: Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-11-Use-at-industrial-sites_Rubber-production-and-processing.pdf

Use: Use in polymer production, Use at industrial sites

Main User Groups Sectors of end-use SU3: Industrial uses
SU12: Manufacture of plastics products, including



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Chemical product category	compounding and conversion : PC32: Polymer preparations	
Process categories	without likelihood of exposur containment conditions PROC2: Chemical productio process with occasional cont equivalent containment cond PROC3: Manufacture or form in closed batch processes wi or processes with equivalent PROC4: Chemical productio arises PROC5: Mixing or blending i PROC6: Calendering operat PROC8a: Transfer of substa (charging/discharging) at nor PROC8b: Transfer of substa (charging/discharging) at dec PROC9: Transfer of substan containers (dedicated filling I PROC10: Roller application PROC13: Treatment of articl	nulation in the chemical industry ith occasional controlled exposure t containment condition on where opportunity for exposure in batch processes tions ance or mixture n dedicated-facilities ance or mixture dicated facilities ance or mixture into small line, including weighing) or brushing les by dipping and pouring ession, extrusion, pelettisation, reagent
Environmental Release Categor		cess regulators in polymerisation inclusion or not into/onto article)

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-12-Use-at-industrial-sites_Polymer-manufacturing.pdf

Use: Use in polymer processing	, Use at industrial sites
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Main User Groups Sectors of end-use	 SU3: Industrial uses SU12: Manufacture of plastics products, including compounding and conversion
Chemical product category	: PC32: Polymer preparations and compounds
Process categories	: PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent



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	process with occasional contro equivalent containment condition PROC3: Manufacture or formut in closed batch processes with or processes with equivalent controls	alation in the chemical industry occasional controlled exposure ontainment condition where opportunity for exposure batch processes ns ce or mixture dedicated-facilities ce or mixture cated facilities e or mixture into small e, including weighing) brushing s by dipping and pouring sion, extrusion, pelettisation,
Environmental Release Categories	: ERC6d: Use of reactive proces processes at industrial site (inc	

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-13-Use-atindustrial-sites_Polymer-processing.pdf

Main User Groups Sectors of end-use	 SU3: Industrial uses SU6b, SU8, SU9: Manufacture of pulp, paper and paper products, Manufacture of bulk, large scale chemicals (including petroleum products), Manufacture of fine chemicals
Chemical product category	 PC8: Biocidal products PC9a: Coatings and paints, thinners, paint removers PC21: Laboratory chemicals PC26: Paper and board treatment products PC30: Photo-chemicals PC35: Washing and cleaning products
Process categories	: PROC1: Chemical production or refinery in closed process

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		containment conditions PROC2: Chemical production process with occasional correquivalent containment connor PROC3: Manufacture or forrin closed batch processes with or processes with equivalent PROC4: Chemical production arises PROC5: Mixing or blending PROC7: Industrial spraying PROC8a: Transfer of substate (charging/discharging) at nor PROC8b: Transfer of substate (charging/discharging) at dece PROC9: Transfer of substate containers (dedicated filling PROC10: Roller applicationed PROC13: Treatment of article PROC15: Use as laboratory PROC19: Manual activities	mulation in the chemical industry vith occasional controlled exposure at containment condition on where opportunity for exposure in batch processes ance or mixture on dedicated-facilities ance or mixture edicated facilities nce or mixture into small line, including weighing) or brushing cles by dipping and pouring y reagent
Environmental Release	Categories	: ERC4: Use of non-reactive inclusion into or onto article	processing aid at industrial site (no)

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-14-Use-at-industrial-sites_Use-in-or-as-cleaning-agent.pdf

Use: Oil field well drilling and production operations (including drilling muds and well cleaning) including material transfers, on-site formulation, well head operations, shaker room activities and related maintenance., Use at industrial sites

Main User Groups Sectors of end-use	 SU3: Industrial uses SU2a, SU2b: Mining, (without offshore industries), Offshore industries
Chemical product category	 PC8: Biocidal products PC35: Washing and cleaning products PC41: Oil and gas exploration or production products
Process categories	: PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

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	process with occasional contr equivalent containment condit PROC3: Manufacture or form in closed batch processes wit or processes with equivalent o	ulation in the chemical industry h occasional controlled exposure containment condition h where opportunity for exposure nce or mixture dedicated-facilities nce or mixture icated facilities
Environmental Release Categorie	es : ERC4: Use of non-reactive pr inclusion into or onto article)	rocessing aid at industrial site (no
Additional information available from	n:	

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-15-Use-at-industrial-sites_Use-in-oil-field-drilling-and-production-operations.pdf

Use: Use in blowing agents, Use at industrial sites

Main User Groups Sectors of end-use	 SU3: Industrial uses SU0, SU5, SU16, SU17, SU18, SU19: Other, Manufacture of textiles, leather, fur, Manufacture of computer, electronic and optical products, electrical equipment, General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment, Manufacture of furniture, Building and construction work
Process categories	 PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment containment condition PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC8b: Transfer of substance or mixture (charging/discharging) at dedicated facilities PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC12: Use of blowing agents in manufacture of foam PROC8a: Transfer of substance or mixture



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		t non dedicated-facilities enance (cleaning and repair) of
Environmental Release	e Categories : ERC4: Use of non-react inclusion into or onto arti	ive processing aid at industrial site (no icle)
Additional information ava https://www.borealisgrou industrial-sitesBlowing	p.com/storage/Base-Chemicals/Acetone/E	Exposure-Scenarios/ES-16-Use-at-

Use: Production of foam-based objects, Service life - consumers

Main User Groups Environmental Release Categories	SU21: Consumer uses ERC10a, ERC11a: Widespread use of articles with low
	release (outdoor), Widespread use of articles with low release (indoor)

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-17-Service-life-consumers_Articles-containing-foam.pdf

se: Use in mining chemicals, Use at industrial sites		
Main User Groups Sectors of end-use Process categories	 SU3: Industrial uses SU2a: Mining, (without offshore industries) PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4: Chemical production where opportunity for exposure arises PROC5: Mixing or blending in batch processes PROC8b: Transfer of substance or mixture (charging/discharging) at dedicated facilities PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC8a: Transfer of substance or mixture 	



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	(charging/discharging) at nor PROC28: Manual maintenan machinery	
Environmental Release Categories	s : ERC4: Use of non-reactive p inclusion into or onto article)	processing aid at industrial site (no
Additional information available from	:	

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-18-Use-at-industrial-sites_Mining-chemicals.pdf

Use: Use in laboratories, Widespread use by professional workers

Main User Groups Sectors of end-use	 SU22: Professional uses SU8, SU9, SU24: Manufacture of bulk, large scale chemicals (including petroleum products), Manufacture of fine chemicals, Scientific research and development
Chemical product category	 PC1: Adhesives, sealants PC3: Air care products PC4: Anti-freeze and de-icing products PC8: Biocidal products PC9a: Coatings and paints, thinners, paint removers PC9b: Fillers, putties, plasters, modelling clay PC9c: Finger paints PC12: Fertilizers PC15: Non-metal surface treatment products PC21: Laboratory chemicals PC24: Lubricants, greases, release products PC29: Pharmaceuticals PC30: Photo-chemicals PC31: Polishes and wax blends PC32: Polymer preparations and compounds PC35: Washing and cleaning products PC38: Welding and soldering products, flux products PC39: Cosmetics, personal care products PC39: Extraction agents
Process categories	 PROC10: Roller application or brushing PROC15: Use as laboratory reagent PROC19: Manual activities involving hand contact PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC28: Manual maintenance (cleaning and repair) of machinery



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Environmental Release Categorie	s : ERC8a: Widespread use of non-r inclusion into or onto article, indo	

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-19-Widespread-use-by-professional-workers_Use-in-laboratories.pdf

Use: Use in coatings, Widespread use by professional workers

Main User Groups : Sectors of end-use :	SU22: Professional uses SU0, SU15, SU16, SU17, SU18, SU6a: Other, Manufacture of fabricated metal products, except machinery and equipment, Manufacture of computer, electronic and optical products, electrical equipment, General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment, Manufacture of furniture, Manufacture of wood and wood products
Chemical product category :	 PC1: Adhesives, sealants PC9a: Coatings and paints, thinners, paint removers PC9b: Fillers, putties, plasters, modelling clay PC9c: Finger paints
Process categories :	 PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4: Chemical production where opportunity for exposure arises PROC5: Mixing or blending in batch processes PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC11: Non-industrial spraying PROC13: Treatment of articles by dipping and pouring PROC15: Use as laboratory reagent PROC219: Manual activities involving hand contact PROC218: Manual maintenance (cleaning and repair) of machinery



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Environmental Release Categories : **ERC8d, ERC8a, ERC8f, ERC8c:** Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor), Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor), Widespread use leading to inclusion into/onto article (outdoor), Widespread use leading to inclusion into/onto article (indoor)

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-20-Widespread-use-by-professional-workers-_Use-in-coatings_adhesives.pdf

Use: Use in binder and release agents, Widespread use by professional workers

Main User Groups Process categories	 SU22: Professional uses PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4: Chemical production where opportunity for exposure arises PROC5: Mixing or blending in batch processes PROC6: Calendering operations PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC8b: Transfer of substance or mixture (charging/discharging) at dedicated facilities PROC9: Transfer of substance or mixture inclaring (dedicated filling line, including weighing) PROC10: Roller application or brushing PROC11: Non-industrial spraying PROC28: Manual maintenance (cleaning and repair) of machinery
Environmental Release Categories	: ERC8d, ERC8a, ERC8e, ERC8b, ERC8f, ERC8c: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor), Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor), Widespread use of reactive processing aid (no inclusion into or onto article, outdoor), Widespread use of reactive processing aid (no inclusion into or onto article, indoor),



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Widespread use leading to inclusion into/onto article (outdoor), Widespread use leading to inclusion into/onto article (indoor)

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-21-Widespread-use-by-professional-workers_Use-as-binder-and-release-agent.pdf

Use: Use in polymer production, Widespread use by professional workers

Main User Groups Sectors of end-use Chemical product category	-	SU22: Professional uses SU12: Manufacture of plastics products, including compounding and conversion PC32: Polymer preparations and compounds
Process categories	:	 PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC8b: Transfer of substance or mixture (charging/discharging) at dedicated facilities PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC14: Tabletting, compression, extrusion, pelettisation, granulation PROC28: Manual maintenance (cleaning and repair) of machinery
Environmental Release Categories	:	ERC8d, ERC8a, ERC8f: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor), Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor), Widespread use leading to inclusion into/onto article (outdoor)
Additional information available from:	(5	

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-22-Widespread-use-by-professional-workers Polymer-manufacturing.pdf

Use: Use in polymer processing, Widespread use by professional workers



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Main User Groups Sectors of end-use	 SU22: Professional uses SU12: Manufacture of plastic compounding and conversio 	n
Chemical product category	: PC32: Polymer preparations	and compounds
Process categories	without likelihood of exposur containment conditions PROC2: Chemical production process with occasional con- equivalent containment conce PROC8a: Transfer of substate (charging/discharging) at not PROC8b: Transfer of substate (charging/discharging) at dee PROC9: Transfer of substate containers (dedicated filling)	ance or mixture n dedicated-facilities ance or mixture dicated facilities nce or mixture into small line, including weighing) ession, extrusion, pelettisation,
Environmental Release Categorie	processing aid (no inclusion	
Additional information available fron	1:	

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-23-Widespread-use-by-professional-workers_Polymer-processing.pdf

Use: Use in cleaning agents, Widespread use by professional workers

Main User Groups	: SU22: Professional uses
Sectors of end-use	: SU6b, SU8, SU9: Manufacture of pulp, paper and paper
	products, Manufacture of bulk, large scale chemicals
	(including petroleum products), Manufacture of fine chemicals
Chemical product category	: PC21: Laboratory chemicals
	PC26: Paper and board treatment products
	PC30: Photo-chemicals
	PC35: Washing and cleaning products
	PC8: Biocidal products
	PC9a: Coatings and paints, thinners, paint removers



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Process categories		without likelihood of exposure containment conditions PROC2: Chemical productio process with occasional cont equivalent containment cond PROC3: Manufacture or form in closed batch processes wi or processes with equivalent	nulation in the chemical industry th occasional controlled exposure containment condition n where opportunity for exposure n batch processes nce or mixture dedicated-facilities nce or mixture dicated facilities ce or mixture into small ine, including weighing) or brushing aying es by dipping and pouring nvolving hand contact
Environmental Release Catego	ries :	ERC8a: Widespread use of r inclusion into or onto article,	non-reactive processing aid (no indoor)
Additional information available fr https://www.borealisgroup.com/st Widespread-use-by-professional-	orage/E		

Main User Groups Sectors of end-use	 SU22: Professional uses SU2a, SU2b: Mining, (without offshore industries), Offshore industries
Chemical product category	 PC35: Washing and cleaning products PC41: Oil and gas exploration or production products PC8: Biocidal products
Process categories	: PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent



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containment conditions PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4: Chemical production where opportunity for exposure arises PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC8b: Transfer of substance or mixture (charging/discharging) at dedicated facilities PROC28: Manual maintenance (cleaning and repair) of machinery	Version 17.0 Re	evision Date: 27.12.2023	Former date: 07.11.2022
Environmental Delegas Categories		 PROC2: Chemical production process with occasional contrainment condition of the equivalent containment condition of the equivalent containment condition of the equivalent processes with equivalent processes processes with equivalent processes proces processes processes processes processes proces processes proce	rolled exposure or processes with itions nulation in the chemical industry th occasional controlled exposure containment condition n where opportunity for exposure nce or mixture n dedicated-facilities nce or mixture dicated facilities
Environmental Release Categories : ERC8d: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)	Environmental Release Categories	•	

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-25-Widespread-use-by-professional-workers-Use-in-oil-field-drilling-and-production-operations.pdf

Main User Groups Sectors of end-use Chemical product category	 SU22: Professional uses SU1: Agriculture, forestry, fishery PC12: Fertilizers PC27: Plant protection products PC8: Biocidal products
Process categories	 PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC4: Chemical production where opportunity for exposure arises PROC8a: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities PROC8b: Transfer of substance or mixture (charging/discharging) at dedicated facilities PROC11: Non-industrial spraying PROC13: Treatment of articles by dipping and pouring PROC19: Manual activities involving hand contact

Use: Use in agrochemicals, Widespread use by professional workers



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	PROC28: Manual maintenal machinery	nce (cleaning and repair) of
Environmental Release Categori	•	d use of non-reactive processing article, outdoor), Widespread use id (no inclusion into or onto

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-26-Widespread-use-by-professional-workers_Agrochemical-uses.pdf

Use: Use in de-icing and anti-icing fluids, Widespread use by professional workers

Main User Groups Chemical product category	:	SU22: Professional uses PC4: Anti-freeze and de-icing products
Process categories	:	 PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC8b: Transfer of substance or mixture (charging/discharging) at dedicated facilities PROC11: Non-industrial spraying PROC19: Manual activities involving hand contact PROC28: Manual maintenance (cleaning and repair) of machinery
Environmental Release Categories	:	ERC8d: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-27-Widespread-use-by-professional-workers_De-icing-and-anti-icing-applications.pdf

Use: Use in explosives, Widespread use by profess	ional workers

Main User Groups Chemical product category	 : SU22: Professional uses : PC11: Explosives
Process categories	: PROC1: Chemical production or refinery in closed process



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	without likelihood of exposure of containment conditions PROC3: Manufacture or formulin closed batch processes with or processes with equivalent of PROC5: Mixing or blending in PROC8a: Transfer of substance (charging/discharging) at non of PROC8b: Transfer of substance (charging/discharging) at dedice PROC28: Manual maintenance machinery	lation in the chemical industry occasional controlled exposure ontainment condition batch processes ce or mixture dedicated-facilities ce or mixture cated facilities
Environmental Release Categorie	es : ERC8d: Widespread use of no inclusion into or onto article, or	
	n: age/Base-Chemicals/Acetone/Exposu orkers_Explosives-manufacture-and-u	

Use: Consumer, Consumer use

Main User Groups Chemical product category :	-	 SU21: Consumer uses PC1: Adhesives, sealants PC3: Air care products PC4: Anti-freeze and de-icing products PC8: Biocidal products PC9a: Coatings and paints, thinners, paint removers PC9b: Fillers, putties, plasters, modelling clay PC9c: Finger paints PC15: Non-metal surface treatment products PC16: Heat transfer fluids PC24: Lubricants, greases, release products PC29: Pharmaceuticals PC31: Polishes and wax blends PC35: Washing and cleaning products, flux products PC38: Welding and soldering products, flux products PC39: Cosmetics, personal care products
Environmental Release Categories	:	ERC8d, ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor), Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

Additional information available from:



SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

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https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-29-Consumer-use_Consumer-uses.pdf

Use: Production of foam-based objects, Service life - consumers

Main User Groups Chemical product category		SU21: Consumer uses AC0: Other
Environmental Release Categories	:	ERC10a, ERC11a: Widespread use of articles with low release (outdoor), Widespread use of articles with low release (indoor)

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-30-Service-life-consumers_Articles-containing-foam.pdf

