according to Regulation (EC) No. 1907/2006

Acetone

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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

REACH Registration Number : 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 : Manufacture, Formulation, Use in laboratories, Use as an Substance/Mixture : intermediate. Use in coatings, Use in binder and release

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

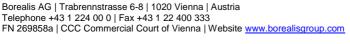
Trabrennstrasse 6-8, 1020 Vienna, Austria

Telephone: +43 1 22400 0

E-mail address : sds@borealisgroup.com

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.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Supplemental Hazard

Statements

EUH066

Repeated exposure may cause skin

dryness or cracking.

Precautionary statements : Prevention:

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 immediately.

In case of skin contact : Take off all contaminated clothing immediately.

Wash off immediately with soap and plenty of water.

Obtain medical attention.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 10 minutes.

Seek medical advice immediately.

If swallowed : Seek medical advice immediately.

Do NOT induce vomiting.

Rinse mouth, ingest activated charcoal.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Skin and eye contact:

tingling

Inhalation may provoke the following symptoms:

Respiratory irritation

Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and

vomiting.

Ingestion may provoke the following symptoms:

Gastrointestinal discomfort

Skin contact:

Repeated exposure may cause skin dryness or cracking.

Risks : Causes serious eye irritation.

May cause drowsiness or dizziness.

Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Symptoms of poisoning may not appear for several hours.

Keep under medical supervision for at least 48 hours. Artificial respiration and/or oxygen may be necessary.

Risk of delayed pulmonary oedema.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : 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 apparatus and protective suit. Complete suit protecting against chemicals Flame retardant

protective clothing

Further information : Remove all sources of ignition.

Cool containers/tanks with water spray.

Do not allow run-off from fire fighting to enter drains or water

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

Advice on safe handling

: 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. Wash hands before breaks and immediately after handling the

product.

When using do not eat, drink or smoke.

Ensure that eyewash stations and safety showers are close to

the workstation location.

Advice on protection against

fire and explosion

: Keep away from heat and sources of ignition. No smoking. Take precautionary measures against static discharges. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

: 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.

Advice 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			
		HTP-arvot 8h	500 ppm 1.200 mg/m3	FI OEL
		HTP-arvot 15 min	630 ppm 1.500 mg/m3	FI OEL

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
	Soil	29,5 mg/kg



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Sewage treatment plant 100 mg/l

8.2 Exposure controls

Engineering measures

Use only explosion-proof equipment.

Provide adequate ventilation.

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection

Material : butyl-rubber
Break through time : > 240 min
Glove thickness : 0,5 mm

Remarks : For prolonged or repeated contact use protective gloves.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The selected protective gloves have to satisfy the specifications of

Regulation (EU) 2016/425 and the standard EN 374 derived

from it.

Skin and body protection : Use solvent-resistant protective clothing.

Flame retardant protective clothing Safety shoes according to EN 345-347.

Respiratory protection : Wear respiratory protection when its use is identified for

certain contributing scenario.

Filter type : Organic gas and low boiling vapour type (AX)

Environmental exposure controls

General advice : 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.

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

pH : 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 classified 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 : Maximisation Test Exposure routes : Skin contact Species : Guinea pig

Remarks : Does not cause skin sensitisation.

Germ cell mutagenicity

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

Components:

acetone:

Genotoxicity in vitro : Test Type: gene mutation test

Method: OECD Test Guideline 471

Result: negative

: Test Type: In vitro gene mutation study in mammalian cells

Method: OECD Test Guideline 476

Result: negative

: Test Type: Chromosome aberration test in vitro

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 : Mouse, female

Application Route : Dermal Exposure time : 1 yr Remarks : negative

Reproductive toxicity

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

Components:

acetone:

Effects on fertility : Remarks: study scientifically unjustified

Effects on foetal : Application Route: Inhalation

development General Toxicity Maternal: NOAEC: 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 : Rat, male
Application Route : Inhalation
Exposure time : 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 Toxicity

Product:

Ecotoxicology Assessment

Long-term (chronic) aquatic

hazard

: This product has no known ecotoxicological effects.

Components:

acetone:

Toxicity 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

Toxicity to daphnia and other

aquatic 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

Toxicity to algae/aquatic

plants

: 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

Toxicity to microorganisms : EC12 (Bacteria): 1.000 mg/l

Exposure time: 30 min

Test Type: Respiration inhibition of activated sludge

Toxicity to fish (Chronic

toxicity)

: Remarks: study scientifically unjustified



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: NOEC: 2.212 mg/l

Toxicity to daphnia and other

aquatic invertebrates

Exposure time: 28 d (Chronic toxicity)

Species: Daphnia magna (Water flea)

Test Type: flow-through test Remarks: Fresh water

12.2 Persistence and degradability

Product:

Stability in water : Hydrolysis: (0 %)

Photodegradation : Test Type: Air

Half-life (direct photolysis): 10 d

Components:

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:

: Bioconcentration factor (BCF): 3 Bioaccumulation

Method: calculated

Remarks: Bioaccumulation not expected: Partition coefficient

(n-octanol/water) log Kow < 3.

Components:

acetone:

Partition coefficient: n-

octanol/water

: log Pow: -0,24

12.4 Mobility in soil

Product:

Mobility : Remarks: Soil, High mobility



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Remarks: Water:, The product evaporates readily.

12.5 Results of PBT and vPvB assessment

Product:

Assessment : 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...

12.6 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.

12.7 Other adverse effects

Product:

Additional ecological

information

The product should not be allowed to enter drains, water

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 : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3
Tunnel restriction code : (D/E)

RID

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

IMDG

Packing group : II
Labels : 3
EmS Code : 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 user

Remarks : SDS: No specific instructions needed.

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Ship type : N/A Pollution category : Z

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

Conditions of restriction for the following entries should be

mixtures and articles (Annex XVII) considered:

Number on list 40, 3

Regulation (EU) 2019/1148 on the marketing and use of

explosives precursors

acetone (ANNEX II)

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point., Industrial use

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

P5a/b/c

FLAMMABLE LIQUIDS

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 dryness or cracking.

Full text of other abbreviations

2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first

list of indicative occupational exposure limit values

FI OEL : Finland. HTP Values - Concentrations Known to be Harmful

2000/39/EC / TWA : Limit Value - eight hours
FI OEL / HTP-arvot 8h : Long term exposure limit
FI OEL / HTP-arvot 15 min : Short term exposure limit

Further information

Other information : Changes since the last version are highlighted in the margin.

This version replaces all previous versions.

Issuer : Borealis, Group Product Stewardship / Mikaela Eriksson.

Sources of key data used to compile the Safety Data

Sheet

International Chemical Safety Card, Acetone, April 1994 (http://www.inchem.org/documents/icsc/icsc/eics0087.htm)

Environment Guide 71; Environmental properties of chemicals, Finnish Environment Institute, Helsinki 2000 REACH Registration Dossier Acetone. P&D-REACH

Consortium, 2022

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 : SU3: Industrial uses

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

PROC5: Mixing or blending in batch processes **PROC8b:** Transfer of substance or mixture (charging/discharging) at dedicated facilities

PROC3: 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 : ERC1: 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 : SU3: Industrial uses

Chemical product category : **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

PC9c: Finger paints



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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

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

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 : ERC2: Formulation into mixture

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 : 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 PC29: Pharmaceuticals PC30: Photo-chemicals

PC35: Washing and cleaning products **PC39:** Cosmetics, personal care products



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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

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-3-Use-at-industrial-sites Use-of-substance-as-intermediate-Z.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 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 : 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 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 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

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-6-Use-at-industrial-sites Use-of-substance-as-intermediate-C.pdf

Use: 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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(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 : ERC4: Use of non-reactive processing aid at industrial site (no

inclusion into or onto article)

Additional information available from:

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

Use: Use in laboratories, Use at industrial sites

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

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 maintenance (cleaning and repair) of

machinery

Environmental Release Categories : ERC4: Use of non-reactive processing aid at industrial site (no

inclusion into or onto article)

Additional information available from:

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 : SU3: Industrial uses

Sectors of end-use : 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 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



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PROC15: Use as laboratory reagent

PROC19: Manual activities involving hand contact **PROC28:** Manual maintenance (cleaning and repair) of

machinery

Environmental Release Categories : **ERC4:** Use of non-reactive processing aid at industrial site (no

inclusion into or onto article)

Additional information available from:

 $https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-9-Use-at-industrial-sites_Use-in-coatings_adhesives.pdf$

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

Main User Groups : SU3: Industrial uses

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 spraying

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 **PROC28:** Manual maintenance (cleaning and repair) of

machinery

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 spraying

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 : SU3: Industrial uses

Sectors of end-use : SU12: Manufacture of plastics products, including



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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

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 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

PROC15: Use as laboratory reagent

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-12-Use-at-industrial-sites_Polymer-manufacturing.pdf

Use: Use in polymer processing, Use at industrial sites

Main User Groups : SU3: Industrial uses

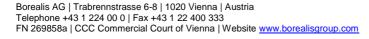
Sectors of end-use : **SU12:** Manufacture of plastics products, including

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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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 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

PROC15: Use as laboratory reagent

PROC28: Manual maintenance (cleaning and repair) of

machinery

: **ERC6d:** Use of reactive process regulators in polymerisation **Environmental Release Categories**

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-13-Use-atindustrial-sites Polymer-processing.pdf

Use: Use in cleaning agents, 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

PC8: Biocidal products Chemical product category

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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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 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

PROC15: Use as laboratory reagent

PROC19: Manual activities involving hand contact **PROC28:** Manual maintenance (cleaning and repair) of

machinery

Environmental Release Categories : ERC4: Use of non-reactive processing aid at industrial site (no

inclusion into or onto article)

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 : SU3: Industrial uses

Sectors of end-use : 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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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

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

Environmental Release Categories : ERC4: Use of non-reactive processing aid at industrial site (no

inclusion into or onto article)

Additional information available from:

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 : SU3: Industrial uses

Sectors of end-use : 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 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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(charging/discharging) at non dedicated-facilities **PROC28:** Manual maintenance (cleaning and repair) of machinery

Environmental Release Categories :

ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

Additional information available from:

https://www.borealisgroup.com/storage/Base-Chemicals/Acetone/Exposure-Scenarios/ES-16-Use-at-industrial-sites- -Blowing-agents.pdf

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

Main User Groups : **SU21:** Consumer uses

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-17-Service-life-consumers Articles-containing-foam.pdf

Use: Use in mining chemicals, Use at industrial sites

Main User Groups : SU3: Industrial uses

Sectors of end-use : SU2a: Mining, (without offshore industries)

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 **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 non dedicated-facilities **PROC28:** Manual maintenance (cleaning and repair) of

machinery

Environmental Release Categories : ERC4: Use of non-reactive processing aid at industrial site (no

inclusion into or onto article)

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 : **SU22:** Professional 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 : 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

PROC28: Manual maintenance (cleaning and repair) of

machinery



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Environmental Release Categories : ERC8a: Widespread use of non-reactive processing aid (no

inclusion into or onto article, indoor)

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 : **SU22:** Professional uses

Sectors of end-use : 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 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

PROC11: Non-industrial spraying **PROC13:** Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

PROC19: Manual activities involving hand contact

PROC28: 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 : **SU22:** Professional uses

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

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

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 : SU22: Professional uses

Sectors of end-use : 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

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:

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 : SU22: Professional uses

Sectors of end-use : **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

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:

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 : **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 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 **PROC11:** Non-industrial spraying

PROC13: Treatment of articles by dipping and pouring **PROC19:** Manual activities involving hand contact **PROC28:** Manual maintenance (cleaning and repair) of

machinery

Environmental Release Categories : ERC8a: Widespread use of non-reactive processing aid (no

inclusion into or onto article, indoor)

Additional information available from:

Widespread-use-by-professional-workers_Use-in-or-as-cleaning-agents.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., Widespread use by professional workers

Main User Groups : **SU22:** Professional uses

Sectors of end-use : 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

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-25-Widespread-use-by-professional-workers-Use-in-oil-field-drilling-and-production-operations.pdf

Use: Use in agrochemicals, Widespread use by professional workers

Main User Groups : **SU22:** Professional uses

Sectors of end-use : **SU1:** Agriculture, forestry, fishery

Chemical product category : **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



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PROC28: Manual maintenance (cleaning and repair) of

machinery

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:

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 : **SU22:** Professional uses

Chemical product category : **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 professional workers

Main User Groups : SU22: Professional uses

Chemical product category : PC11: Explosives

Process categories : **PROC1:** Chemical production or refinery in closed process



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without likelihood of 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 PROC5: Mixing or blending in batch processes 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

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-28-Widespread-use-by-professional-workers Explosives-manufacture-and-use.pdf

Use: Consumer, Consumer use

Main User Groups : **SU21:** Consumer uses 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

PC15: Non-metal surface treatment products

PC16: Heat transfer fluids

PC24: Lubricants, greases, release products

PC27: Plant protection products

PC29: Pharmaceuticals

PC31: Polishes and wax blends **PC35:** Washing and cleaning 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:



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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 : **SU21:** Consumer uses

Chemical product category : 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

