



## Safety Data Sheet PU Accelerator

Safety Data Sheet dated 7/1/2022, version 1

### 1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: PU Accelerator

Other means of identification:

Trade code: 6ADTS133

Recommended use of the chemical and restrictions on use

Recommended use: Auxiliary for surface coating

Restrictions on use:

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Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company:

Sirca S.p.A.

Address:

Viale Roma, 85  
35010 S. Dono di Massanzago (PD) - ITALY  
Tel. +39 0499322311

Distributed by:

GEMINI INDUSTRIES, INC.  
2300 Holloway Drive  
El Reno, OK 73036  
USA  
Tel. 1-800-262-5710  
Fax 1-405-262-9310  
www.gemini-coatings.com

Competent person responsible for the safety data sheet:

safety@sirca.it

Emergency phone number

For Hazardous Materials [or Dangerous Goods] Incident  
Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night  
1-800-424-9300 / +1 703-527-3887.

### 2. HAZARD(S) IDENTIFICATION

Classification of the chemical



Danger, Flam. Liq. 2, Highly flammable liquid and vapour.



Danger, Eye Dam. 1, Causes serious eye damage.



Warning, STOT SE 3, May cause drowsiness or dizziness.

Label elements

Hazard pictograms:



Danger

Hazard statements:

H225 Highly flammable liquid and vapour.

H318 Causes serious eye damage.

H336 May cause drowsiness or dizziness.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER/doctor/...  
 P312 Call a POISON CENTER/doctor/... if you feel unwell.  
 P370+P378 In case of fire: Use a CO2, Foam, Chemical powders for extinction.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Hazards not otherwise classified identified during the classification process:

None

Ingredient(s) with unknown acute toxicity:

None.

Additional classification information

NFPA rating:



HMS rating:

HEALTH	* 2
FLAMMABILITY	3
PHYSICAL HAZARD	1
PERSONAL PROTECTION	

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

>= 48% - < 75% butanone

REACH No.: 01-2119457290-43-xxxx, Index number: 606-002-00-3, CAS: 78-93-3, EC: 201-159-0



B.6/2 Flam. Liq. 2 H225



A.3/2A Eye Irrit. 2A H319



A.8/3 STOT SE 3 H336

>= 25% - < 48% ethyl acetate

REACH No.: 01-2119475103-46-xxxx, Index number: 607-022-00-5, CAS: 141-78-6, EC: 205-500-4



B.6/2 Flam. Liq. 2 H225



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A.3/2A Eye Irrit. 2A H319

A.8/3 STOT SE 3 H336

>= 7% - < 9.9% Bis[2-(diethylamino)ethyl] adipate  
REACH No.: 01-2120770738-40-xxxx, CAS: 16545-00-9, EC: 240-610-6

A.2/2 Skin Irrit. 2 H315

A.3/1 Eye Dam. 1 H318

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#### 4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Immediately take off all contaminated clothing.  
OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

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#### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

In case of fire: Use a CO<sub>2</sub>, Foam, Chemical powders for extinction.

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products:

None

Explosive properties:

N.A.

Oxidizing properties:

N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

Methods and materials for containment and cleaning up

Wash with plenty of water.

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#### 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not use on extensive surface areas in premises where there are occupants.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.



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See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from flame and sparks. Avoid accumulating electrostatic charge.

Place recipients on the ground whilst decanting, and wear anti-static clothing and shoes.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

Safety electric system.

Storage temperature:

Store at ambient temperature.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

butanone - CAS: 78-93-3

(OEL (IT)) - TWA(8h): 600 mg/m<sup>3</sup>, 200 ppm - STEL: 900 mg/m<sup>3</sup>, 300 ppm - Behaviour: Binding

EU - TWA(8h): 600 mg/m<sup>3</sup>, 200 ppm - STEL: 900 mg/m<sup>3</sup>, 300 ppm

ACGIH - TWA(8h): 200 ppm - STEL: 300 ppm - Notes: BEI - URT irr, CNS and PNS impair

ethyl acetate - CAS: 141-78-6

(OEL (IT)) - TWA: 734 mg/m<sup>3</sup>, 200 ppm - STEL: 1469 mg/m<sup>3</sup>, 400 ppm

ACGIH - TWA(8h): 400 ppm - Notes: URT and eye irr

EU - TWA(8h): 734 mg/m<sup>3</sup>, 200 ppm - STEL: 1468 mg/m<sup>3</sup>, 400 ppm

DNEL Exposure Limit Values

butanone - CAS: 78-93-3

Worker Industry: 1161 mg/Kg-bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 600 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 412 mg/Kg-bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 106 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 31 mg/Kg-bw/day - Exposure: Human Oral - Frequency: Long Term, systemic effects

ethyl acetate - CAS: 141-78-6

Worker Industry: 1468 mg/m<sup>3</sup> - Consumer: 734 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Industry: 1468 ppm - Exposure: Human Inhalation - Frequency: Short Term (acute)

Worker Industry: 63 mg/Kg-bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 734 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Industry: 734 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 4.5 mg/Kg-bw/day - Exposure: Human Oral - Frequency: Long Term, systemic effects

Consumer: 734 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term (acute)

Consumer: 734 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 37 mg/Kg-bw/day - Exposure: Human Dermal - Frequency: Long Term, local effects

Consumer: 367 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, local effects

Consumer: 367 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

butanone - CAS: 78-93-3

Target: Marine water - Value: 55.8 mg/l

Target: Fresh Water - Value: 55.8 mg/l

Target: occasional emission - Value: 55.8 mg/l

Target: STP - Value: 709 mg/l

Target: Freshwater sediments - Value: 284.7 mg/kg dwt

Target: Marine water sediments - Value: 284.7 mg/kg dwt

Target: Soil (agricultural) - Value: 22.5 mg/kg

Target: orally (secondary poisoning) - Value: 1000 mg/kg

ethyl acetate - CAS: 141-78-6

Target: Fresh Water - Value: 0.26 mg/l

Target: Marine water - Value: 0.026 mg/l

Target: Freshwater sediments - Value: 1.25 mg/kg

Target: Marine water sediments - Value: 0.125 mg/kg

Target: Soil (agricultural) - Value: 0.24 mg/kg

Target: orally (secondary poisoning) - Value: 200 mg/kg - Notes: Dietetico

Target: STP - Value: 650 mg/l

Appropriate engineering controls:

None

Individual protection measures

Eye protection:



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- Use close fitting safety goggles, don't use eye lens.
- Protection for skin:  
Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
- Protection for hands:  
Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
- Respiratory protection:  
Use adequate protective respiratory equipment.
- Thermal Hazards:  
None

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	liquid
Odour:	characteristic
Odour threshold:	N.A.
pH:	N.A.
Melting point / freezing point:	< 1° C
Initial boiling point and boiling range:	> 55° C
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	< 21°C - < 69.8 °F
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	0.8160 Kg/l a 20°C
Solubility in water:	N.A.
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	> 250° C
Decomposition temperature:	N.A.
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

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### 10. STABILITY AND REACTIVITY

- Reactivity  
It may generate dangerous reactions (See subsections below)
- Chemical stability  
It may generate dangerous reactions (See subsections below)
- Possibility of hazardous reactions  
No dangerous reaction is stored and used appropriately.
- Conditions to avoid  
Avoid accumulating electrostatic charge.  
Vapours can form explosive mixtures with air.
- Incompatible materials  
Avoid contact with combustible materials. The product could catch fire.
- Hazardous decomposition products  
None.

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### 11. TOXICOLOGICAL INFORMATION

- Information on toxicological effects  
Toxicological information of the product:  
N.A.
- Toxicological information of the main substances found in the product:
- butanone - CAS: 78-93-3
- a) acute toxicity:  
Test: LD50 - Route: Oral - Species: Rat = 2737 mg/kg  
Test: LD50 - Route: Skin - Species: Rabbit = 6480 mg/kg  
Test: LC50 - Route: Inhalation - Species: Rat = 23.5 mg/l - Duration: 8h
- b) skin corrosion/irritation:  
Test: Skin Corrosive - Species: Rabbit Negative - Notes: moderatamente irritante
- ethyl acetate - CAS: 141-78-6
- a) acute toxicity:  
Test: LD50 - Route: Skin - Species: Rabbit > 20000 mg/kg  
Test: LD50 - Route: Oral - Species: Rat = 5620 mg/kg  
Test: LC50 - Route: Inhalation - Species: Rat > 29.3 mg/l - Duration: 4h  
Test: LD50 - Route: Oral - Species: Rabbit = 4934 mg/kg body weight
- b) skin corrosion/irritation:  
Test: Skin Irritant - Route: Skin - Species: Rabbit Negative



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- e) germ cell mutagenicity:  
Test: Genotoxicity Negative
  - j) aspiration hazard:  
Test: Respiratory Tract Corrosive - Route: Inhalation Positive
- Bis[2-(diethylamino)ethyl] adipate - CAS: 16545-00-9
- a) acute toxicity:  
Test: LD50 - Route: Oral - Species: Rat = 3720 mg/kg
  - b) skin corrosion/irritation:  
Test: Eye Irritant Yes  
Test: Skin Irritant Yes

Substance(s) listed on the NTP report on Carcinogens:

None.

Substance(s) listed on the IARC Monographs:

None.

Substance(s) listed as OSHA Carcinogen(s):

None.

Substance(s) listed as NIOSH Carcinogen(s):

None.

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## 12. ECOLOGICAL INFORMATION

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

butanone - CAS: 78-93-3

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 3220 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia > 520 mg/l - Duration h: 48

ethyl acetate - CAS: 141-78-6

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 454.7 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 154 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 3300 mg/l - Duration h: 48

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Algae > 100 mg/l - Duration h: 72

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

None

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## 13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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## 14. TRANSPORT INFORMATION

UN number

ADR-UN Number: 1263

DOT-UN Number: 1263

IATA-UN Number: 1263

IMDG-UN Number: 1263

UN proper shipping name

ADR-Shipping Name: Paint Related material

DOT-Shipping Name: Paint Related material

IATA-Shipping Name: Paint Related material

IMDG-Shipping Name: Paint Related material

Transport hazard class(es)

ADR-Class: 3

DOT-Class: 3

IATA-Class: 3

IMDG-Class: 3

Packing group

ADR-Packing Group: II

DOT-Packing Group: II

IATA-Packing group: II

IMDG-Packing group: II



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Environmental hazards  
ADR-Environmental Pollutant: No  
IMDG-Marine pollutant: No  
Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)  
No  
Special precautions  
ADR-Tunnel Restriction Code: D/E  
DOT-Special provisions: 149, B52, IB2, T4, TP1, TP8, TP28  
IATA-Passenger Aircraft: 353  
IATA-Cargo Aircraft: 364  
IATA-S.P.: A72  
IATA-ERG: 8L  
IMDG-EmS: F-E, S-E  
IMDG-Storage category: B  
IMDG-Storage notes: None

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## 15. REGULATORY INFORMATION

### USA - Federal regulations

TSCA - Toxic Substances Control Act  
List of substances included in the TSCA inventory: butanone, ethyl acetate.  
List of substances not included in the TSCA inventory: Bis[2-(diethylamino)ethyl] adipate.  
TSCA listed substances:  
None.  
SARA - Superfund Amendments and Reauthorization Act  
Section 302 – Extremely Hazardous Substances: no substances listed.  
Section 304 – Hazardous substances: no substances listed.  
Section 313 – Toxic chemical list: no substances listed.  
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
Substance(s) listed under CERCLA: butanone - Reportable quantity: 5000 pounds  
ethyl acetate - Reportable quantity: 5000 pounds.  
Reportable quantity for mixture: 7692.307692 pounds.  
CAA - Clean Air Act  
CAA listed substances:  
butanone is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON  
ethyl acetate is listed in CAA Section 111.  
CWA - Clean Water Act  
CWA listed substances:  
ethyl acetate is listed in CWA Section 304.

### USA - State specific regulations

California Proposition 65  
Substance(s) listed under California Proposition 65:  
None.  
Massachusetts Right to know  
Substance(s) listed under Massachusetts Right to know:  
butanone  
ethyl acetate.  
New Jersey Right to know  
Substance(s) listed under New Jersey Right to know:  
butanone  
ethyl acetate.  
Pennsylvania Right to know  
Substance(s) listed under Pennsylvania Right to know:  
butanone  
ethyl acetate.

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## 16. OTHER INFORMATION

Text of phrases referred to under heading 3:  
H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.

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### Disclaimer:

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.  
This Safety Data Sheet cancels and replaces any preceding release.



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### PU Accelerator

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average