according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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

#### 1.1 Product identifier

Trade name : Glyclean™ D99

SDS-Identcode : 130000147739

REACH Registration Number : 01-2119485579-17-0000

Substance name : Glycolic acid

EC-No. : 201-180-5

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

Use of the Sub-

stance/Mixture

Biocidal product

Recommended restrictions

on use

Not applicable

### 1.3 Details of the supplier of the safety data sheet

Company : PureTech Scientific LLC (Appointed Only Representative:

Blue Frog Scientific EURL)

901 W. DuPont Ave

Belle, WV 25015 United States of America (USA)

Telephone : 1-877-215-5999

Telefax : 1-304-357-1364

E-mail address of person

responsible for the SDS

: sds-support@puretechscientific.com

### 1.4 Emergency telephone number

+1 760 476 3962 access code 336264

#### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

### Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 H332: Harmful if inhaled.

Skin corrosion, Sub-category 1B H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1 H318: Causes serious eye damage.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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#### 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

Supplemental Hazard

Statements

EUH071 Corrosive to the respiratory tract.

Precautionary statements : Prevention:

P260 Do not breathe dust or mist.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

Response:

P301 + P330 + P331 + P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON

CENTER/ doctor.

P303 + P361 + P353 + P310 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or

shower. Immediately call a POISON CENTER/ doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER/ doctor.

#### 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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Substance name : Glycolic acid

EC-No. : 201-180-5

### Components

Chemical name	CAS-No.	Concentration (%	M-Factor, SCL, ATE
	EC-No.	w/w)	
Glycolic acid	79-14-1 201-180-5	>= 90 - <= 100	Acute toxicity estimate
			Acute inhalation toxici-
			ty (dust/mist): 3.6 mg/l

### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

If inhaled : If inhaled, remove to fresh air.

If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

In case of skin contact : In case of contact, immediately flush skin with plenty of water

for at least 15 minutes while removing contaminated clothing

and shoes.

Get medical attention immediately. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention immediately.

If swallowed, DO NOT induce vomiting.

If vomiting occurs have person lean forward.

Call a physician or poison control centre immediately.

Rinse mouth thoroughly with water.

Never give anything by mouth to an unconscious person.

#### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Inhalation may provoke the following symptoms:

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Cough

Shortness of breath

Pain Irritation

Skin contact may provoke the following symptoms:

Irritation Rash Necrosis Discomfort

Eye contact may provoke the following symptoms

Corrosion Ulceration Severe irritation

Ingestion may provoke the following symptoms:

Gastrointestinal discomfort

Nausea Vomiting Diarrhoea

Risks Causes digestive tract burns.

Causes serious eye damage.

Harmful if inhaled.

Corrosive to the respiratory tract.

Causes severe burns.

#### 4.3 Indication of any immediate medical attention and special treatment needed

**Treatment** : Treat symptomatically and supportively.

### **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media : Water spray

> Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

### 5.2 Special hazards arising from the substance or mixture

fighting

Specific hazards during fire- : Exposure to combustion products may be a hazard to health.

Hazardous combustion prod- : Carbon oxides

ucts

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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#### 5.3 Advice for firefighters

Special protective equipment:

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

#### **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

### 6.2 Environmental precautions

Environmental precautions : Avoid release to the environment.

Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Surround spill with absorbents and place a damp covering

over the area to minimise entry of the material into the air. Add excess liquid to allow the material to enter into solution.

Soak up with inert absorbent material.

Clean up remaining materials from spill with suitable absor-

bent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

### **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust

ventilation.

Advice on safe handling : Do not breathe decomposition products.

Do not get on skin or clothing.

Avoid breathing dust, fume, gas, mist, vapours or spray.

Do not breathe dust or mist.

Do not swallow. Do not get in eyes.

Wash skin thoroughly after handling.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as-

sessment

Keep container tightly closed.

Take care to prevent spills, waste and minimize release to the

environment.

Hygiene measures : If exposure to chemical is likely during typical use, provide eye

flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contami-

nated clothing before re-use.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Keep in properly labelled containers. Store locked up. Keep tightly closed. Keep in a cool, well-ventilated place. Store in

accordance with the particular national regulations.

Advice on common storage : Do not store with the following product types:

Strong oxidizing agents

Self-reactive substances and mixtures

Organic peroxides

**Explosives** 

Recommended storage tem: :

perature

> 10 °C

### 7.3 Specific end use(s)

Specific use(s) : No data available

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Carbon dioxide	124-38-9	TWA	5,000 ppm	2006/15/EC

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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			9,000 mg/m3	
	Further inform	ation: Indicative		
		OELV - 8 hrs (TWA)	5,000 ppm 9,000 mg/m3	IE OEL

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Glycolic acid	Workers	Inhalation	Acute systemic effects	9.2 mg/m3
	Workers	Inhalation	Acute local effects	9.2 mg/m3
	Workers	Skin contact	Long-term systemic effects	57.69 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	10.56 mg/m3
	Workers	Inhalation	Long-term local ef- fects	1.53 mg/m3
	Consumers	Inhalation	Acute systemic effects	2.3 mg/m3
	Consumers	Skin contact	Long-term systemic effects	28.85 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	0.75 mg/kg bw/day
	Consumers	Inhalation	Acute local effects	2.3 mg/m3
	Consumers	Inhalation	Long-term systemic effects	2.6 mg/m3

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

Substance name	Environmental Compartment	Value
Glycolic acid	Fresh water	0.0312 mg/l
	Freshwater - intermittent	0.312 mg/l
	Marine water	0.0031 mg/l
	Marine sediment	0.0115 mg/kg dry weight (d.w.)
	Fresh water sediment	0.115 mg/kg dry weight (d.w.)
	Soil	0.007 mg/kg dry weight (d.w.)
	Sewage treatment plant	7 mg/l
	Oral (Secondary Poisoning)	16.66 mg/kg food

### 8.2 Exposure controls

### **Engineering measures**

Processing may form hazardous compounds (see section 10).

Minimize workplace exposure concentrations.

If sufficient ventilation is unavailable, use with local exhaust ventilation.

### Personal protective equipment

Eye/face protection : Wear the following personal protective equipment:

Chemical resistant goggles must be worn.

If splashes are likely to occur, wear:

Face-shield

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Equipment should conform to I.S. EN 166

Hand protection

Material : Chemical-resistant gloves

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration and quantity of the hazardous substance and specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the

end of workday.

Skin and body protection : Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Respiratory protection : If adequate local exhaust ventilation is not available or expo-

sure assessment demonstrates exposures outside the rec-

ommended guidelines, use respiratory protection. Equipment should conform to I.S. EN 14387

Filter type : Inorganic gas/vapour type (B)

### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Physical state : crystalline

Colour : colourless

Odour : slight

Odour Threshold : No data available

Melting point/freezing point : > 78 °C

Initial boiling point and boiling

range

169 °C

Flammability (solid, gas) : Not classified as a flammability hazard, Not expected to form

explosive dust-air mixtures.

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower : No data available

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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flammability limit

Flash point :  $> 100 \, ^{\circ}\text{C}$ 

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : No data available

Viscosity

Viscosity, kinematic : 6.149 mm2/s (23 °C)

Solubility(ies)

Water solubility :  $> 300 \text{ g/l} (22 ^{\circ}\text{C})$ 

Partition coefficient: n-

octanol/water

log Pow: -1.07 (25 °C)

Vapour pressure : 0.0041 hPa (25 °C)

Relative density : 1.36 (26 °C)

Density : 1.266 g/cm³ (20 °C)

Relative vapour density : Not applicable

Particle characteristics

Particle size : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Evaporation rate : Not applicable

### **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

Not classified as a reactivity hazard.

### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Can react with strong oxidizing agents.

Hazardous decomposition products will be formed at elevated

temperatures.

### 10.4 Conditions to avoid

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

Thermal decomposition : Carbon dioxide

**SECTION 11: Toxicological information** 

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

Information on likely routes of : Skin contact exposure Ingestion

Eye contact

**Acute toxicity** 

Harmful if inhaled.

**Product:** 

Acute inhalation toxicity : Acute toxicity estimate: 3.61 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

**Components:** 

Glycolic acid:

Acute oral toxicity : LD50 (Rat): 2,040 mg/kg

Method: US EPA Test Guideline OPP 81-1

Acute inhalation toxicity : LC50 (Rat): 3.6 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Causes severe burns.

Components:

Glycolic acid:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Corrosive after 3 minutes to 1 hour of exposure

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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### Serious eye damage/eye irritation

Causes serious eye damage.

### **Components:**

### Glycolic acid:

Species : Rabbit

Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

### Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

### Respiratory sensitisation

Not classified based on available information.

#### **Components:**

#### Glycolic acid:

Test Type : Buehler Test Exposure routes : Skin contact Species : Guinea pig

Method : OECD Test Guideline 406

Result : negative

### Germ cell mutagenicity

Not classified based on available information.

### **Components:**

### Glycolic acid:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 474

Result: negative

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Germ cell mutagenicity- As-

sessment

Weight of evidence does not support classification as a germ

cell mutagen.

### Carcinogenicity

Not classified based on available information.

#### **Components:**

Glycolic acid:

Species : Mouse
Application Route : Skin contact
Exposure time : 40 weeks
Result : negative

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

### Reproductive toxicity

Not classified based on available information.

#### Components:

Glycolic acid:

Effects on fertility : Test Type: One-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion

Method: Regulation (EC) No. 440/2008, Annex, B.34

Result: negative

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 414

Result: negative

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

#### STOT - single exposure

Corrosive to the respiratory tract.

### STOT - repeated exposure

Not classified based on available information.

### Repeated dose toxicity

#### **Components:**

### Glycolic acid:

Species : Rat, male and female

NOAEL : 150 mg/kg LOAEL : 300 mg/kg Application Route : Ingestion

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Exposure time : 90 Days

Method : OECD Test Guideline 408

### **Aspiration toxicity**

Not classified based on available information.

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

**Product:** 

Assessment : The substance/mixture does not contain components consid-

ered 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.

### Experience with human exposure

**Product:** 

Inhalation : Symptoms: Cough, Dizziness, Severe irritation, Damage

Symptoms: At atmospheric temperature, this product has only a minimal risk of inhalation due to its low vapour pressure., Inhalation of dust may cause serious respiratory problems.,

Corrosive to the respiratory tract.

Skin contact : Symptoms: Inflammation, Burn, Damage, Corrosion

Eye contact : Symptoms: Severe irritation, Corrosion, Ulceration

Ingestion : Symptoms: Vomiting, Diarrhoea, Abdominal pain, Gastrointes-

tinal disturbance

### **SECTION 12: Ecological information**

### 12.1 Toxicity

#### **Components:**

Glycolic acid:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 114.8 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 99.6 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 31.2

mg/l

Exposure time: 72 h

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 14.4

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

### 12.2 Persistence and degradability

**Components:** 

Glycolic acid:

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301B

12.3 Bioaccumulative potential

**Components:** 

Glycolic acid:

Partition coefficient: n-

octanol/water

log Pow: -1.07

12.4 Mobility in soil

No data available

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 consid-

ered 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

No data available

**SECTION 13: Disposal considerations** 

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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According to the European Waste Catalogue, Waste Codes

are not product specific, but application specific.

Waste codes should be assigned by the user, preferably in

discussion with the waste disposal authorities.

Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

### **SECTION 14: Transport information**

#### 14.1 UN number or ID number

ADN : UN 3261
ADR : UN 3261
RID : UN 3261
IMDG : UN 3261
IATA : UN 3261

#### 14.2 UN proper shipping name

ADN : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

(Glycolic acid)

ADR : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

(Glycolic acid)

RID : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

(Glycolic acid)

IMDG : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

(Glycolic acid)

IATA : Corrosive solid, acidic, organic, n.o.s.

(Glycolic acid)

#### 14.3 Transport hazard class(es)

Class Subsidiary risks

ADN : 8
ADR : 8
RID : 8
IMDG : 8
IATA : 8

### 14.4 Packing group

ADN

Packing group : II Classification Code : C4

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Hazard Identification Number : 80 Labels : 8

**ADR** 

Packing group : II
Classification Code : C4
Hazard Identification Number : 80
Labels : 8
Tunnel restriction code : (E)

**RID** 

Packing group : II
Classification Code : C4
Hazard Identification Number : 80
Labels : 8

**IMDG** 

Packing group : II
Labels : 8
EmS Code : F-A, S-B

IATA (Cargo)

Packing instruction (cargo : 863

aircraft)

Packing instruction (LQ) : Y844
Packing group : II

Labels : Corrosive

IATA (Passenger)

Packing instruction (passen: 859

ger aircraft)

Packing instruction (LQ) : Y844
Packing group : II

Labels : Corrosive

14.5 Environmental hazards

**ADN** 

Environmentally hazardous : no

ADF

Environmentally hazardous : no

rid

Environmentally hazardous : no

**IMDG** 

Marine pollutant : no

14.6 Special precautions for user

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

Remarks : Not applicable for product as supplied.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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### **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, mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered: Number on list 75

If you intend to use this product as tattoo ink, please contact your ven-

Formaldehyde (Number on list 72,

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

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

Not applicable

### 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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USA, 967 Route de la Plaine, La Plaine, 26400 Chabrillan,

France, or@bluefrogscientific.com.

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lines.

EUH071 Corrosive to the respiratory tract.

Full text of other abbreviations

2006/15/EC Europe. Indicative occupational exposure limit values

IE OEL Ireland. List of Chemical Agents and Occupational Exposure

Limit Values - Schedule 1

2006/15/EC / TWA Limit Value - eight hours

IE OEL / OELV - 8 hrs (TWA) : Occupational exposure limit value (8-hour reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road: AIIC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

Sources of key data used to compile the Safety Data

eChem Portal search results and European Chemicals Agen-Sheet cy, http://echa.europa.eu/

Internal technical data, data from raw material SDSs, OECD

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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### **Annex: Exposure Scenarios**

### **Table of Contents**

Number	Title
ES1	Industrial use; Formulation [mixing] of preparations and/or re-packaging (SU10); Cosmetics, personal care products.; Perfumes, fragrances (PC28).; Cosmetics, personal care products (PC39).
ES2	Consumer use; Professional uses (SU22); Cosmetics, personal care products.; Perfumes, fragrances (PC28).; Cosmetics, personal care products (PC39).

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ES 1: Industrial use; Formulation [mixing] of preparations and/or re-packaging (SU10); Cosmetics, personal care products.; Perfumes, fragrances (PC28).; Cosmetics, personal care products (PC39).

### 1.1. Title section

Exposure Scenario name	: Cosmetics, personal care products
Structured Short Title	<ul> <li>Industrial use; Formulation [mixing] of preparations and/or re- packaging (SU10); Cosmetics, personal care products.; Per- fumes, fragrances (PC28).; Cosmetics, personal care products (PC39).</li> </ul>

Environ	nent	
CS 1	Formulation, Cosmetics, personal care products	ERC2
Worker		
CS 2	Use in closed process	PROC1
CS 3	Use in semi-closed process with opportunity for exposure	PROC2
CS 4	Batch process, Closed systems	PROC3
CS 5	Mixing operations, Batch process	PROC5
CS 6	Material transfers, Non-dedicated facility	PROC8a
CS 7	Material transfers, Dedicated facility	PROC8b
CS 8	Material transfers, Small scale, Dedicated equipment	PROC9
CS 9	Tabletting, compression, extrusion or pelletisation	PROC14
CS 10	Laboratory activities	PROC15

### 1.2. Conditions of use affecting exposure

### 1.2.1. Control of environmental exposure: Formulation into mixture (ERC2)

Product (article) characteristics
Covers percentage substance in the product up to 100 %.
Physical form of product : solid
Amount used (or contained in articles), frequency and duration of use/exposure
Annual site tonnage (tonnes/year) : 100 ton(s)/year

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Fraction of EU tonnage used in re- : 1

gion

Emission days : 220

Technical and organisational conditions and measures

Air emission controls are not applicable as there is no direct release to air.

Release fraction to wastewater from process 0.001

Low environmental release

Soil emission controls are not applicable as there is no direct release to soil.

Conditions and measures related to sewage treatment plant

STP type : Municipal Sewage Treatment Plant

STP effluent : 2,000 m3/d

Conditions and measures related to treatment of waste (including article waste)

Waste treatment : Dispose of waste product or used containers according to local

regulations.

Other conditions affecting environmental exposure

Receiving surface water flow : 18,000 m3/d

Local freshwater dilution factor : 10

Local marine water dilution factor : 100

1.2.2. Control of worker exposure: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Physical form of product : Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure

Duration : Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

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Local exhaust ventilation

Handle substance within a closed system.

### Conditions and measures related to personal protection, hygiene and health evaluation

Wear suitable coveralls to prevent exposure to the skin.

Use eye protection according to EN 166.

When there is a potential for exposure:

Wear suitable gloves tested to EN374.

### Other conditions affecting workers exposure

Indoor or outdoor use : Indoor use

### Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply

Segregate the activity away from other operations.

Avoid manual contact with contaminated tools and objects.

Ensure material transfers are under containment or extract ventilation.

Clean equipment and the work area every day.

Ensure operatives are trained to minimise exposures.

Assumes a good basic standard of occupational hygiene is implemented.

# 1.2.3. Control of worker exposure: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

### Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Physical form of product : Solid, medium dustiness

### Amount used (or contained in articles), frequency and duration of use/exposure

Duration : Covers daily exposures up to 8 hours

### Technical and organisational conditions and measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Local exhaust ventilation

Handle substance within a predominantly closed system provided with extract ventilation.

### Conditions and measures related to personal protection, hygiene and health evaluation

Wear suitable coveralls to prevent exposure to the skin.

Use eye protection according to EN 166.

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When there is a potential for exposure: Wear suitable gloves tested to EN374.

### Other conditions affecting workers exposure

Indoor or outdoor use : Indoor use

#### Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply

Segregate the activity away from other operations.

Avoid manual contact with contaminated tools and objects.

Ensure material transfers are under containment or extract ventilation.

Clean equipment and the work area every day.

Ensure operatives are trained to minimise exposures.

Assumes a good basic standard of occupational hygiene is implemented.

# 1.2.4. Control of worker exposure: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC3)

### Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Physical form of product : Solid, medium dustiness

#### Amount used (or contained in articles), frequency and duration of use/exposure

Duration : Covers daily exposures up to 8 hours

### Technical and organisational conditions and measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Local exhaust ventilation

### Conditions and measures related to personal protection, hygiene and health evaluation

Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Dermal - minimum efficiency of 90 %

Wear suitable coveralls to prevent exposure to the skin.

Use eye protection according to EN 166.

### Other conditions affecting workers exposure

Indoor or outdoor use : Indoor use

### Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply

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Segregate the activity away from other operations.

Avoid manual contact with contaminated tools and objects.

Ensure material transfers are under containment or extract ventilation.

Clean equipment and the work area every day.

Ensure operatives are trained to minimise exposures.

Assumes a good basic standard of occupational hygiene is implemented.

### 1.2.5. Control of worker exposure: Mixing or blending in batch processes (PROC5)

### Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Physical form of product : Solid, medium dustiness

### Amount used (or contained in articles), frequency and duration of use/exposure

Duration : Covers daily exposures up to 8 hours

#### Technical and organisational conditions and measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Local exhaust ventilation

### Conditions and measures related to personal protection, hygiene and health evaluation

Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Dermal - minimum efficiency of 90 %

Wear suitable coveralls to prevent exposure to the skin.

Use eye protection according to EN 166.

### Other conditions affecting workers exposure

Indoor or outdoor use : Indoor use

### Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply

Segregate the activity away from other operations.

Avoid manual contact with contaminated tools and objects.

Ensure material transfers are under containment or extract ventilation.

Clean equipment and the work area every day.

Ensure operatives are trained to minimise exposures.

Assumes a good basic standard of occupational hygiene is implemented.

## 1.2.6. Control of worker exposure: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities (PROC8a)

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### Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Physical form of product : Solid, low dustiness

### Amount used (or contained in articles), frequency and duration of use/exposure

Duration : Covers daily exposures up to 8 hours

### Technical and organisational conditions and measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

### Conditions and measures related to personal protection, hygiene and health evaluation

Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Dermal - minimum efficiency of 90 %

Wear suitable coveralls to prevent exposure to the skin.

Use eye protection according to EN 166.

### Other conditions affecting workers exposure

Indoor or outdoor use : Indoor use

### Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply

Segregate the activity away from other operations.

Avoid manual contact with contaminated tools and objects.

Ensure material transfers are under containment or extract ventilation.

Clean equipment and the work area every day.

Ensure operatives are trained to minimise exposures.

Assumes a good basic standard of occupational hygiene is implemented.

## 1.2.7. Control of worker exposure: Transfer of substance or mixture (charging/discharging) at dedicated facilities (PROC8b)

### Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Physical form of product : Solid, low dustiness

#### Amount used (or contained in articles), frequency and duration of use/exposure

Duration : Covers daily exposures up to 8 hours

### Technical and organisational conditions and measures

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Local exhaust ventilation

Transfer via enclosed lines.

#### Conditions and measures related to personal protection, hygiene and health evaluation

Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Dermal - minimum efficiency of 90 %

Wear suitable coveralls to prevent exposure to the skin.

Use eye protection according to EN 166.

### Other conditions affecting workers exposure

Indoor or outdoor use : Indoor use

### Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply

Segregate the activity away from other operations.

Avoid manual contact with contaminated tools and objects.

Ensure material transfers are under containment or extract ventilation.

Clean equipment and the work area every day.

Ensure operatives are trained to minimise exposures.

Assumes a good basic standard of occupational hygiene is implemented.

## 1.2.8. Control of worker exposure: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC9)

### Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Physical form of product : Solid, medium dustiness

### Amount used (or contained in articles), frequency and duration of use/exposure

Duration : Covers daily exposures up to 8 hours

#### Technical and organisational conditions and measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Local exhaust ventilation

Use in semi-automated and predominantly enclosed filling lines.

### Conditions and measures related to personal protection, hygiene and health evaluation

Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.

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Dermal - minimum efficiency of 90 %

Wear suitable coveralls to prevent exposure to the skin.

Use eye protection according to EN 166.

Other conditions affecting workers exposure

Indoor or outdoor use : Indoor use

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply

Segregate the activity away from other operations.

Avoid manual contact with contaminated tools and objects.

Ensure material transfers are under containment or extract ventilation.

Clean equipment and the work area every day.

Ensure operatives are trained to minimise exposures.

Assumes a good basic standard of occupational hygiene is implemented.

## 1.2.9. Control of worker exposure: Tabletting, compression, extrusion, pelettisation, granulation (PROC14)

### Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Physical form of product : Solid, medium dustiness

Amount used (or contained in articles), frequency and duration of use/exposure

Duration : Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Local exhaust ventilation

Conditions and measures related to personal protection, hygiene and health evaluation

Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Dermal - minimum efficiency of 90 %

Wear suitable coveralls to prevent exposure to the skin.

Use eye protection according to EN 166.

Other conditions affecting workers exposure

Indoor or outdoor use : Indoor use

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply

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Segregate the activity away from other operations.

Avoid manual contact with contaminated tools and objects.

Ensure material transfers are under containment or extract ventilation.

Clean equipment and the work area every day.

Ensure operatives are trained to minimise exposures.

Assumes a good basic standard of occupational hygiene is implemented.

### 1.2.10. Control of worker exposure: Use as laboratory reagent (PROC15)

#### Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Physical form of product : Solid, low dustiness

### Amount used (or contained in articles), frequency and duration of use/exposure

Duration : Covers daily exposures up to 8 hours

#### Technical and organisational conditions and measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

#### Conditions and measures related to personal protection, hygiene and health evaluation

Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Dermal - minimum efficiency of 90 %

Wear suitable coveralls to prevent exposure to the skin.

Use eye protection according to EN 166.

### Other conditions affecting workers exposure

Indoor or outdoor use : Indoor use

### Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply

Segregate the activity away from other operations.

Avoid manual contact with contaminated tools and objects.

Ensure material transfers are under containment or extract ventilation.

Clean equipment and the work area every day.

Ensure operatives are trained to minimise exposures.

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### 1.3. Exposure estimation and reference to its source

### 1.3.1. Environmental release and exposure: Formulation into mixture (ERC2)

Protection Target	Exposure estimate	RCR
Freshwater	0.004 mg/L (ECETOC TRA environment v2.0)	0.128
Marine water	0.000405 mg/L (ECETOC TRA environment v2.0)	0.131
Freshwater sediment	0.015 mg/kg dry weight (d.w.) (ECETOC TRA environment v2.0)	0.128
Marine sediment	0.0015 mg/kg dry weight (d.w.) (ECETOC TRA environment v2.0)	0.13
Agricultural soil	0.001 mg/kg dry weight (d.w.) (ECETOC TRA environment v2.0)	0.14
Sewage treatment plant	0.029 mg/L (ECETOC TRA environment v2.0)	< 0.005

## 1.3.2. Worker exposure: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

Exposure route	Health effect	Exposure indicator	Exposure esti- mate	RCR
inhalative	systemic	short-term	0.02 mg/m³ (ECETOC TRA worker v2.0)	< 0.003
inhalative	systemic	long-term	0.01 mg/m³ (ECETOC TRA worker v2.0)	< 0.001
dermal	systemic	long-term	0.343 mg/kg dry weight (ECETOC TRA worker v2.0)	< 0.006
inhalative	local	long-term	0.01 mg/m³ (ECETOC TRA worker v2.0)	< 0.007

## 1.3.3. Worker exposure: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Exposure route	Health effect		Exposure esti- mate	RCR
inhalative	systemic	short-term	0.1 mg/m <sup>3</sup>	0.011

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			(ECETOC TRA worker v2.0)	
inhalative	systemic	long-term	0.05 mg/m³ (ECETOC TRA worker v2.0)	< 0.005
dermal	systemic	long-term	1.37 mg/kg dry weight (ECETOC TRA worker v2.0)	0.024
inhalative	local	long-term	0.05 mg/m³ (ECETOC TRA worker v2.0)	0.033

# 1.3.4. Worker exposure: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC3)

Exposure route	Health effect	Exposure indicator	Exposure esti- mate	RCR
inhalative	systemic	short-term	0.2 mg/m³ (ECETOC TRA worker v2.0)	0.022
inhalative	systemic	long-term	0.1 mg/m³ (ECETOC TRA worker v2.0)	< 0.01
dermal	systemic	long-term	< 0.035 mg/kg dry weight (ECETOC TRA worker v2.0)	< 0.001
inhalative	local	long-term	0.1 mg/m³ (ECETOC TRA worker v2.0)	0.065

### 1.3.5. Worker exposure: Mixing or blending in batch processes (PROC5)

Exposure route	Health effect	Exposure indicator	Exposure esti- mate	RCR
inhalative	systemic	short-term	1 mg/m³ (ECETOC TRA worker v2.0)	0.11
inhalative	systemic	long-term	0.5 mg/m³ (ECETOC TRA worker v2.0)	0.047
dermal	systemic	long-term	1.37 mg/kg dry weight (ECETOC TRA worker v2.0)	0.024
inhalative	local	long-term	0.5 mg/m <sup>3</sup>	0.33

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			(ECETOC TRA worker v2.0)	

## 1.3.6. Worker exposure: Transfer of substance or mixture (charging/discharging) at non dedicated-facilities (PROC8a)

Exposure route	Health effect	Exposure indicator	Exposure esti- mate	RCR
inhalative	systemic	short-term	1 mg/m³ (ECETOC TRA worker v2.0)	0.11
inhalative	systemic	long-term	0.5 mg/m³ (ECETOC TRA worker v2.0)	0.047
dermal	systemic	long-term	1.37 mg/kg dry weight (ECETOC TRA worker v2.0)	0.024
inhalative	local	long-term	0.5 mg/m³ (ECETOC TRA worker v2.0)	0.33

## 1.3.7. Worker exposure: Transfer of substance or mixture (charging/discharging) at dedicated facilities (PROC8b)

Exposure route	Health effect	Exposure indicator	Exposure esti- mate	RCR
inhalative	systemic	short-term	0.01 mg/m³ (ECETOC TRA worker v2.0)	< 0.002
inhalative	systemic	long-term	0.005 mg/m³ (ECETOC TRA worker v2.0)	< 0.001
dermal	systemic	long-term	0.686 mg/kg dry weight (ECETOC TRA worker v2.0)	0.012
inhalative	local	long-term	0.005 mg/m³ (ECETOC TRA worker v2.0)	< 0.004

## 1.3.8. Worker exposure: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC9)

Exposure route	Health effect	Exposure indicator	Exposure esti- mate	RCR
inhalative	systemic	short-term	1 mg/m³ (ECETOC	0.11

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			TRA worker v2.0)	
inhalative	systemic	long-term	0.5 mg/m³ (ECETOC TRA worker v2.0)	0.047
dermal	systemic	long-term	0.686 mg/kg dry weight (ECETOC TRA worker v2.0)	0.012
inhalative	local	long-term	0.5 mg/m³ (ECETOC TRA worker v2.0)	0.33

### 1.3.9. Worker exposure: Tabletting, compression, extrusion, pelettisation, granulation (PROC14)

Exposure route	Health effect	Exposure indicator	Exposure esti- mate	RCR
inhalative	systemic	short-term	0.2 mg/m³ (ECETOC TRA worker v2.0)	0.022
inhalative	systemic	long-term	0.1 mg/m³ (ECETOC TRA worker v2.0)	< 0.01
dermal	systemic	long-term	< 0.035 mg/kg dry weight (ECETOC TRA worker v2.0)	< 0.006
inhalative	local	long-term	0.1 mg/m³ (ECETOC TRA worker v2.0)	0.065

### 1.3.10. Worker exposure: Use as laboratory reagent (PROC15)

Exposure route	Health effect	Exposure indicator	Exposure esti- mate	RCR
inhalative	systemic	short-term	0.2 mg/m³ (ECETOC TRA worker v2.0)	0.022
inhalative	systemic	long-term	0.1 mg/m³ (ECETOC TRA worker v2.0)	< 0.01
dermal	systemic	long-term	0.343 mg/kg dry weight (ECETOC TRA worker v2.0)	< 0.001
inhalative	local	long-term	0.1 mg/m³ (ECETOC TRA worker v2.0)	0.065

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## Glyclean™ D99

 Version
 Revision Date:
 SDS Number:
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 5.0
 11.08.2023
 6567497-00013
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### 1.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

For further information, please contact sds-support@chemours.com.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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ES 2: Consumer use; Professional uses (SU22); Cosmetics, personal care products.; Perfumes, fragrances (PC28).; Cosmetics, personal care products (PC39).

### 2.1. Title section

Exposure Scenario name	: Cosmetics, personal care products
Structured Short Title	: Consumer use; Professional uses (SU22); Cosmetics, personal care products.; Perfumes, fragrances (PC28).; Cosmetics, personal care products (PC39).

Environment					
CS 1 Consumer use, professional use, Cosmetics, personal care products	ERC8a				
Consumer					
CS 2 Consumer use, professional use, Cosmetics, personal care products	PC28, PC39				

### 2.2. Conditions of use affecting exposure

## 2.2.1. Control of environmental exposure: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

Product (article) characteristics					
Physical form of product	:	Liquid			
Amount used (or contained in articles), frequency and duration of use/exposure					
Annual site tonnage	:	200 ton(s)/year			
Daily amount per site	:	0.4 kg/day			
Fraction of Regional tonnage used locally	:	0.00075			
Emission days	:	365			
Conditions and measures related to treatment of waste (including article waste)					
Waste treatment	:	Dispose of waste product or used containers according to local regulations.			
Other conditions affecting environmental exposure					
Receiving surface water flow		: 18,000 m3/d			

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Local freshwater dilution factor	:	10
Local marine water dilution factor	:	100

## 2.2.2. Control of consumer exposure: Perfumes, fragrances (PC28) / Cosmetics, personal care products (PC39)

### 2.3. Exposure estimation and reference to its source

## 2.3.1. Environmental release and exposure: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

Protection Target	Exposure estimate	RCR
Freshwater	0.0014 mg/L (ECETOC TRA environment v2.0)	0.044
Marine water	0.00014 mg/L (ECETOC TRA environment v2.0)	0.046
Freshwater sediment	0.0051 mg/kg dry weight (d.w.) (ECETOC TRA environment v2.0)	0.044
Marine sediment	0.00053 mg/kg dry weight (d.w.) (ECETOC TRA environment v2.0)	0.046
Agricultural soil	0.00091 mg/kg dry weight (d.w.) (ECETOC TRA environment v2.0)	0.13
Sewage treatment plant	0.0026 mg/L (ECETOC TRA environment v2.0)	< 0.001

## 2.3.2. Consumer exposure: Perfumes, fragrances (PC28) / Cosmetics, personal care products (PC39)

### Additional information on exposure estimation

In accordance to the Article 14 (5b) of the REACh Regulation (EC) No 1907/2006, exposure estimation and risk characterisation for human health does not need to be performed for end uses in cosmetic products within the scope of Directive 76/768/EEC.

### 2.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

For further information, please contact sds-support@chemours.com.