

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

BIOSCUD BT FIX

Date of first edition: 12/20/2022 Safety Data Sheet dated 12/20/2022

version 2

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

1.1. Product identifier

Mixture identification:

Trade name: BIOSCUD BT FIX
Trade code: 30072020 -7

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

Recommended use: Adhesives, sealants

Uses advised against: N.A.

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A. Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

1.4. Emergency telephone number

European emergency phone number 112

Kerakoll Italy - +39-0536-816511

Ireland

Poison information centre: 01 809 2166 (Daily 8am-10pm)

In case of emergency call 999 or 112

Malta

In case of emergency call: +356 2395 2000 (24h)

SECTION 2: Hazards identification







2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Flam. Liq. 3 Flammable liquid and vapour.

Skin Irrit. 2 Causes skin irritation.

Eye Irrit. 2 Causes serious eye irritation. STOT SE 3 May cause respiratory irritation.

STOT RE 2 May cause damage to organs through prolonged or repeated exposure.

Asp. Tox. 1 May be fatal if swallowed and enters airways.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Pictograms and Signal Words



Danger

Hazard statements

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

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Precautionary statements					
ed exposure.					

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe mist.

P280 Wear protective gloves and eye/face protection.

P305+P351+P33 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P331 Do NOT induce vomiting.

P501 Dispose of contents/container in accordance with applicable regulations.

Contains

xylene

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration \geq 0.1%.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: BIOSCUD BT FIX

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
25-50 %	xylene	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315; Asp. Tox. 1, H304; STOT RE 2, H373; Eye Irrit. 2, H319: STOT SE 3, H335	01-2119488216-32

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediatley and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

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 opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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

Eye irritation Eye damages

Skin Irritation

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4.3. Indication of any 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).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

Use localized ventilation system.

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.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

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

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Term	Long Term	Short Term	Short Term	Notes
xylene	ACGIH	NNN		mg/m3	ppm 100.000	mg/m3	ppm 150.000	A4, BEI - URT and eye irr, CNS impair
	EU	NNN		221.000	50.000	442.000	100.000	Skin
	NATIONAL	AUSTRIA		221.000	50.000	442.000	100.000	
	NATIONAL	BELGIUM		221.000	50.000	442.000	100.000	
	NATIONAL	CANADA			100.000		150.000	Ontario
	NATIONAL	CANADA		434.000	100.000	651.000	150.000	Québec
	NATIONAL	DENMARK		109.000	25.000	442.000	100.000	
	NATIONAL	FINLAND		220.000	50.000	440.000	100.000	
	NATIONAL	FRANCE		221.000	50.000	442.000	100.000	
	NATIONAL	GERMANY		440.000	100.000	880.000	200.000	AGS
	NATIONAL	GERMANY		440.000	100.000	880.000	200.000	DFG
	NATIONAL	HUNGARY		221.000		442.000		
	NATIONAL	IRELAND		221.000	50.000	442.000	100.000	
	NATIONAL	ISRAEL		434.000	100.000	442.000	100.000	
	NATIONAL	ITALY		221.000	50.000	442.000	100.000	Cute
	NATIONAL	JAPAN			100.000			MHLW
	NATIONAL	JAPAN		217.000	50.000			JSOH
	NATIONAL	LATVIA		221.000	50.000	442.000	100.000	
	NATIONAL	NEW ZEALAND		217.000	50.000			
	NATIONAL	CHINA			50.000		100.000	
	NATIONAL	POLAND			100.000			
	NATIONAL	ROMANIA		221.000	50.000	442.000	100.000	
	NATIONAL	SINGAPORE		434.000	100.000	651.000	150.000	
	NATIONAL	KOREA, REPUBLIC OF		435.000	100.000	655.000	150.000	
	NATIONAL	SPAIN		221.000	50.000	442.000	100.000	
	NATIONAL	SWEDEN		221.000	50.000	442.000	100.000	
	NATIONAL	SWITZERLA ND		435.000	100.000	870.000	200.000	
	NATIONAL	NETHERLA NDS		210.000		442.000		
	NATIONAL	TURKEY		221.000	50.000	442.000	100.000	
	NATIONAL	UNITED STATES OF AMERICA		435.000	100.000	655.000	150.000	NIOSH
	NATIONAL	UNITED STATES OF AMERICA		435.000	100.000			OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		220.000	50.000	441.000	100.000	
	NATIONAL	ARGENTINA			100.000		150.000	
	NATIONAL	BULGARIA		221.000	50.000	445.000	100.000	
	NATIONAL	CZECHIA		200.000		400.000		
	NATIONAL	CHILE		380.000	87.000	621.000	150.000	

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NATIONAL	CROATIA	221.000	50.000	442.000	100.000
NATIONAL	ESTONIA	200.000	50.000	450.000	100.000
NATIONAL	GREECE	435.000	100.000	650.000	150.000
NATIONAL	INDONESIA	434.000	100.000	651.000	150.000
NATIONAL	ICELAND	109.000	25.000	442.000	100.000
NATIONAL	LITHUANIA	221.000	50.000	442.000	100.000
NATIONAL	MEXICO		100.000		150.000
NATIONAL	NORWAY	108.000	25.000		
NATIONAL	PORTUGAL		100.000		150.000
NATIONAL	DUCCIAN	F0 000		450.000	
IVATIONAL	RUSSIAN FEDERATIO N	50.000		150.000	
NATIONAL	FEDERATIO	221.000	50.000	150.000 442.000	100.000
	FEDERATIO N		50.000 50.000		100.000 100.000
NATIONAL	FEDERATIO N SLOVAKIA	221.000		442.000	

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency
xylene	1330-20-7	327.000 µg/l	Freshwater	
		327.000 μg/l	Intermittent releases (freshwater)	
		327.000 µg/l	Marine water	
		6.580 mg/l	Microorganisms in sewage treatments	9
		12.460 mg/kg	Freshwater sediments	
		12.460 mg/kg	Marine water sediments	
		2.310 mg/kg	Soil	

Derived No Effect Level (DNEL) values

	•					
Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
xylene	1330-20-7		289.000 mg/m³	174.000 mg/m ³	Human Inhalation	Short Term, systemic effects
			289.000 mg/m³	174.000 mg/m ³	Human Inhalation	Short Term, local effects
			180.000 mg/kg	108.000 mg/kg	Human Dermal	Long Term, systemic effects
				1.600 mg/kg	Human Oral	Long Term, systemic effects
			77.000 mg/kg	14.800 mg/kg	Human Inhalation	Long Term, systemic effects

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

Disposable suit.

Protection for hands:

Nitrile rubber .

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State Liquid

Color: Black Odour: N.A.

Odour threshold: N.A.

pH: N.A.

Kinematic viscosity: <= 20,5 mm2/sec (40 °C)
Melting point / freezing point: -54 °C (-65 °F)

Initial boiling point and boiling range: 137 °C (279 °F)

Flash point: 30 °C (86 °F)

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 1.03 g/cm3
Solubility in water: N.A.
Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A. Decomposition temperature: N.A.

Flammability: The product is classified Flam. Liq. 3 H226

Volatile Organic compounds - VOCs = 41.7 %

Particle characteristics:

Particle size: N.A.

9.2. Other information

Miscibility: N.A.

Conductivity: N.A.

Evaporation rate: N.A. No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

a) acute toxicity Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation The product is classified: Skin Irrit. 2(H315) c) serious eye damage/irritation The product is classified: Eye Irrit. 2(H319)

d) respiratory or skin sensitisation Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity Not classified

Based on available data, the classification criteria are not met

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g) reproductive toxicity Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure
The product is classified: STOT SE 3(H335)
i) STOT-repeated exposure
The product is classified: STOT RE 2(H373)
j) aspiration hazard
The product is classified: Asp. Tox. 1(H304)

Toxicological information on main components of the mixture:

xylene a) acute toxicity LD50 Oral Rat = 3523.00 ml/Kg

LC50 Inhalation Vapour Rabbit = 26.00 mg/l 4h

LD50 Skin Rat = 4350.00 mg/kg

11.2 Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >=0.1%

SECTION 12: Ecological information

12.1. Toxicity

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

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Value
xylene	Bioaccumulative	BCF - Bioconcentrantion factor	25.900

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7 Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment 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.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

HP 3: Flammable; HP 4: Irritant — skin irritation and eye damage; HP 5: Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

SECTION 14: Transport information

14.1. UN number or ID number

1133

14.2. UN proper shipping name

ADR-Shipping Name: ADHESIVES containing flammable liquid IATA-Technical name: ADHESIVES containing flammable liquid IMDG-Technical name: ADHESIVES containing flammable liquid

14.3. Transport hazard class(es)

ADR-Class: 3 IATA-Class: 3

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IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III IATA-Packing group: III IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: No Environmental Pollutant: No IMDG-EMS: F-E, S-D

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: 3

ADR - Hazard identification number: 30

ADR-Special Provisions: -

ADR-Transport category (Tunnel restriction code): 3 (D/E)

ADR Limited Quantities: 5 L ADR Excepted Quantities: E1

Air (IATA):

IATA-Passenger Aircraft: 355 IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisioning: A3

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 223 955

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2020/878

Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 40

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Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according Lower-tier threshold (tonnes) Upper-tier threshold (tonnes) to Annex 1, part 1

50000

Product belongs to category: P5c 5000

Regulation (EU) 649/2012 (PIC regulation):

No Substance Listed

German Water Hazard Class

Class 2: hazardous for water.

Description

Flammable liquid and vapour.

SVHC Substances:

Code

H226

No data available

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

11220	riaminable liquid and vapour.				
H304	May be fatal if swallowed and enters airways.				
H312	Harmful in contact with skin.				
H315	Causes skin irritation.				
H319	Causes serious eye irritation.				
H332	Harmful if inhaled.				
H335	May cause respiratory irritation.				
H373	May cause damage to organs through prolo	onged or repeated exposure.			
Code	Hazard class and hazard category	Description			
2.6/3	Flam. Lig. 3	Flammable liquid, Category 3			
	riam. Eq. 5	Hammable liquid, Category 5			
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4			
•	•	. ,			
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4			
3.1/4/Dermal 3.1/4/Inhal	Acute Tox. 4 Acute Tox. 4	Acute toxicity (dermal), Category 4 Acute toxicity (inhalation), Category 4			
3.1/4/Dermal 3.1/4/Inhal 3.10/1	Acute Tox. 4 Acute Tox. 4 Asp. Tox. 1	Acute toxicity (dermal), Category 4 Acute toxicity (inhalation), Category 4 Aspiration hazard, Category 1			
3.1/4/Dermal 3.1/4/Inhal 3.10/1 3.2/2	Acute Tox. 4 Acute Tox. 4 Asp. Tox. 1 Skin Irrit. 2	Acute toxicity (dermal), Category 4 Acute toxicity (inhalation), Category 4 Aspiration hazard, Category 1 Skin irritation, Category 2			
3.1/4/Dermal 3.1/4/Inhal 3.10/1 3.2/2 3.3/2	Acute Tox. 4 Acute Tox. 4 Asp. Tox. 1 Skin Irrit. 2 Eye Irrit. 2	Acute toxicity (dermal), Category 4 Acute toxicity (inhalation), Category 4 Aspiration hazard, Category 1 Skin irritation, Category 2 Eye irritation, Category 2			

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedur
2.6/3	On basis of test data
3.2/2	Calculation method
3.3/2	Calculation method
3.8/3	Calculation method
3.9/2	Calculation method
3.10/1	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

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ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

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.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: Keep Away From Heat

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low

N.A.: Not Applicable

N/A: Not Applicable

N/D: Not defined/ Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

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.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class.

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Exposure Scenario, 14/10/2022

Substance identity	
	Xylene, Mixed Isomers
CAS No.	1330-20-7
INDEX No.	601-022-00-9
EINECS No.	215-535-7
Registration number	01-2119488216-32

Table of contents

1. **ES 1** Widespread use by professional workers

1. ES 1 Widespread use by professional workers

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks
Date - Version	14/10/2022 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)

Environment Contributing Scenario

CS1	ERC8a - ERC8d
Worker Contributing Scenario	
CS2 Material transfers	PROC8a
CS3 Rolling, Brushing	PROC10
CS4 Roller, spreader, flow application	PROC11

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d)

Environmental release	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) -
categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
	(FRC8a FRC8d)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use (or from service life)

Emission days: 300 days per year

Conditions and measures related to sewage treatment plant

STP type:

Onsite Sewage Treatment Plant STP effluent (m³/day): 2000

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

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

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

1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities			
	(PROC8a)			

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 500 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Use in closed process

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

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

Personal protection

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.2. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 500 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

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

Personal protection

Wear suitable gloves tested to EN374.

Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.2. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Process Categories Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 500 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Carry out in a vented booth provided with laminar airflow.

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

Personal protection

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8a, ERC8d)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	= 0.0015 mg/L	N/A	= 0.005
marine water	= 0.000145 mg/L	N/A	< 0.001
freshwater sediment	= 0.016 mg/kg wet weight	N/A	= 0.006
marine sediment	= 0.0156 mg/kg wet weight	N/A	< 0.001
soil	= 0.0117 mg/kg wet weight	N/A	= 0.006
Sewage treatment plant	= 0.00866 mg/L	N/A	= 0.001

1.3. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Exposure level	Calculation method	Risk Characterization Ratio (RCR)
= 14 ppm	N/A	= 0.79
= 13.71 mg/kg bw/day	N/A	= 0.08
N/A	N/A	= 0.87
	= 14 ppm = 13.71 mg/kg bw/day	= 14 ppm N/A = 13.71 mg/kg bw/day N/A

1.3. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 3 ppm	N/A	= 0.17
dermal, systemic, long-term	= 27.43 mg/kg bw/day	N/A	= 0.15
combined routes	N/A	N/A	= 0.32

1.3. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)

inhalative, systemic, long-term	= 5 ppm	N/A	= 0.28
dermal, systemic, long-term	= 13.71 mg/kg bw/day	N/A	= 0.08
combined routes	N/A	N/A	= 0.29

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.