

Safety Data Sheet

SB ANTI-YELLOWING HARDENER FOR ACRYLIC PROD.

Safety Data Sheet dated: 5/3/2023 - version 1

Date of first edition: 5/3/2023



1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: SB ANTI-YELLOWING HARDENER FOR ACRYLIC PROD.

Other means of identification:

Trade code: C200

Recommended use of the chemical and restrictions on use

Recommended use: Hardener for professional/industrial use

Restrictions on use: N.A.

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

Company: ICA North America
169 Main Street
West Lorne, ON
N0L 2P0
Canada

Responsible: regulatoryaffairs@icaspa.com

Emergency telephone number

For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire,
Exposure, or Accident Call CHEMTREC Day or Night
Within USA and Canada: 1 -800-424-9300

2. HAZARD(S) IDENTIFICATION



Classification of the chemical

Flammable Liquids — Category 2	Highly flammable liquid and vapour.
Eye irritation, Category 2A	Causes serious eye irritation.
Skin Sensitization, Category 1	May cause an allergic skin reaction.
Specific target organ toxicity following single exposure, Category 3	May cause respiratory irritation.
Specific target organ toxicity following single exposure, Category 3	May cause drowsiness or dizziness.

Label elements

Pictograms and Signal Words



Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
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.
- P264 Wash hands and eyes thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P280 Wear protective gloves/clothing and eye/face protection.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- 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.
- P312 Call a POISON CENTER / doctor / if you feel unwell.
- P321 Specific treatment (see safety data sheet).
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P370+P378 In case of fire, use a dry powder fire extinguisher to extinguish.
- 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.

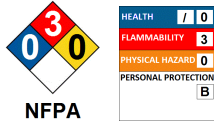
Dir. 2004/42/EC (VOC directive)

This product contains max 505 g/l VOC.

Hazards not otherwise classified identified during the classification process:

None

Additional classification information



HMIS Health: 0 = MINIMAL
 HMIS Flammability: 3 = Flammable liquid
 HMIS Reactivity: 0 = MINIMAL
 HMIS P.P.E.: Safety glasses, gloves
 NFPA Health: 0 = MINIMAL
 NFPA Flammability: 3 = Flammable liquid
 NFPA Reactivity: 0 = MINIMAL
 NFPA Special Risk: NONE

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

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

List of components

Qty	Name	Ident. Numb.	Classification	Registration Number
35-50 %	Hexamethylene-1,6-diisocyanate Homopolymer	CAS:28182-81-2 EC:500-060-2	Skin Sens. 1, H317; Acute Tox. 4, H332; STOT SE 3, H335	01-2119485796-17-XXXX
35-50 %	N-butyl acetate	CAS:123-86-4 EC:204-658-1 Index:607-025-00-1	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119485493-29-XXXX
10-15 %	Ethyl acetate	CAS:141-78-6 EC:205-500-4	Flam. Liq. 2, H225; Eye Irrit. 2A, H319; STOT SE 3, H336	01-2119475103-46-XXXX

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediately 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 ophthalmologist 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.

Most important symptoms/effects, acute and delayed

Eye irritation

Eye damages

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).

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

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: N.A.
- Explosive properties: N.A.
- Oxidizing properties: No

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.
-

6. ACCIDENTAL RELEASE MEASURES

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.

Methods and material for containment and cleaning up

- Suitable material for taking up: absorbing material, organic, sand
 - Wash with plenty of water.
-

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.
- 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.
- Contaminated clothing should be changed before entering eating areas.
- Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: N.A.

Always keep in a well ventilated place.

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.

Avoid accumulating electrostatic charge.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

Safety electric system.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
N-butyl acetate CAS: 123-86-4	MAK	UNITED ARAB EMIRATES	C	480	100	480	100	
	MAK	ALBANIA	C	480	100	960	200	
Ethyl acetate CAS: 141-78-6	EU		C		400			

Predicted No Effect Concentration (PNEC) values

	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
N-butyl acetate CAS: 123-86-4	0.09 mg/kg	Soil (agricultural)		
	0.18 mg/l	Water		
	0.36 mg/l	WATER, INTERMITTING RELEASE		
	0.018 mg/l	Water		
	0.981 mg/kg	Air		
	0.098 mg/kg	Marine water sediments		
Ethyl acetate CAS: 141-78-6	35.6 mg/l	Microorganisms in sewage treatments		
	0.2 g/kg	Food chain		
	0.148 mg/kg	Soil (agricultural)		
	0.24 mg/l	Water		
	0.02 mg/l	Water		
	1.15 mg/kg	Air		
	0.115 mg/kg	Marine water sediments		
	650 mg/l	Microorganisms in sewage treatments		

Derived No Effect Level (DNEL) values

	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
N-butyl acetate CAS: 123-86-4				Human Dermal	Short Term, local effects	
	11 mg/kg		6 mg/kg	Human Dermal	Short Term, systemic effects	
	600 mg/m3		300 mg/m3	Human Inhalation	Short Term, local effects	
	600 mg/m3		300 mg/m3	Human Inhalation	Short Term, systemic effects	

		2 mg/kg	Human Oral	Short Term, systemic effects
			Human Dermal	Long Term, local effects
	11 mg/kg	6 mg/kg	Human Dermal	Long Term, systemic effects
	300 mg/m ³	35.7 mg/m ³	Human Inhalation	Long Term, local effects
	300 mg/m ³	35.7 mg/m ³	Human Inhalation	Long Term, systemic effects
		2 mg/kg	Human Oral	Long Term, systemic effects
Ethyl acetate CAS: 141-78-6	1468 mg/m ³	734 mg/m ³	Human Inhalation	Short Term, local effects
	1468 mg/m ³	734 mg/m ³	Human Inhalation	Short Term, systemic effects
	63 mg/kg	37 mg/kg	Human Dermal	Long Term, systemic effects
	734 mg/m ³	367 mg/m ³	Human Inhalation	Long Term, local effects
	734 mg/m ³	367 mg/m ³	Human Inhalation	Long Term, systemic effects
		4.5 mg/kg	Human Oral	Long Term, systemic effects

Appropriate engineering controls: N.A.

Individual protection measures

Eye protection:

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State: Liquid

Appearance and colour: Liquid Transparent

Odour: Characteristic

Odour threshold: N.A.

pH: Not Relevant

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 80 °C (176 °F)

Flash point: -18°C ≤ T < 23°C

Evaporation rate: N.A.

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

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.01 g/ml

Solubility in water: Insoluble

Solubility in oil: N.A.

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

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: No

Solid/gas flammability: data not applicable

VOC content (g/L) in the product (2010/75/UE) 505.00

VOC content % in the product (2010/75/UE) 50.00

Other information

Substance Groups relevant properties N.A.

Miscibility: N.A.

Fat Solubility: N.A.

Conductivity: N.A.

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

None.

Conditions to avoid

Avoid accumulating electrostatic charge.

Incompatible materials

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

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological Information of the Preparation

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified Based on available data, the classification criteria are not met
c) serious eye damage/irritation	The product is classified: Eye irritation, Category 2A(H319)
d) respiratory or skin sensitisation	The product is classified: Skin Sensitization, Category 1(H317)
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
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	The product is classified: Specific target organ toxicity following single exposure, Category 3(H335), Specific target organ toxicity following single exposure, Category 3(H336)
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

Hexamethylene-1,6-diisocyanate Homopolymer	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rabbit > 2000 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat 2.18 mg/l 4h
N-butyl acetate	a) acute toxicity	LD50 Oral Rat 10760 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rabbit > 14112 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat > 21.1 mg/l 4h
Ethyl acetate	a) acute toxicity	LD50 Oral Rat 4934 mg/kg

- b) skin corrosion/irritation LD50 Skin Rabbit > 20000 mg/kg
 j) aspiration hazard LC50 Inhalation Vapour Rat > 22.5 mg/l 6h

Substance(s) listed on the IARC Monographs:

None

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

None

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

None

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

None

12. ECOLOGICAL INFORMATION

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

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
Hexamethylene-1,6-diisocyanate Homopolymer	CAS: 28182-81-2 - EINECS: 500-060-2	a) Aquatic acute toxicity : EC50 Daphnia 100 mg/L 48h - Daphnia b) Aquatic chronic toxicity : IC50 Algae 51 mg/L 72h - Algae
N-butyl acetate	CAS: 123-86-4 - EINECS: 204-658-1 - INDEX: 607-025-00-1	a) Aquatic acute toxicity : EC50 Daphnia 44 mg/L 48h b) Aquatic chronic toxicity : IC50 Algae 397 mg/L 72h - Alga
Ethyl acetate	CAS: 141-78-6 - EINECS: 205-500-4 - INDEX: 607-022-00-5	a) Aquatic acute toxicity : LC50 Fish 18 mg/L 96h - Fish a) Aquatic acute toxicity : EC50 Daphnia 165 mg/L 48h - Daphnia magna b) Aquatic chronic toxicity : NOEC Algae > 100 mg/L b) Aquatic chronic toxicity : NOEC Daphnia 2.4 mg/L - Daphnia pulex

Persistence and degradability

Component	Persitence/Degradability:	Value
N-butyl acetate	Readily biodegradable	0
Ethyl acetate	Readily biodegradable	0

Bioaccumulative potential

Component	Value
N-butyl acetate	1.27

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS

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.

14. TRANSPORT INFORMATION

UN number

ADR-UN number: 1866
DOT-UN Number: UN1866
IATA-Un number: 1866
IMDG-Un number: 1866

UN proper shipping name

ADR-Shipping Name: RESIN SOLUTION
DOT Proper Shipping Name: Resin solution, flammable
IATA-Technical name: RESIN SOLUTION
IMDG-Technical name: RESIN SOLUTION

Transport hazard class(es)

ADR-Class: 3
DOT Hazard Class: 3
IATA-Class: 3
IMDG-Class: 3

Packing group

ADR-Packing Group: II
ADR exempt: II
IATA-Packing group: II
IMDG-Packing group: II

Environmental hazards

Marine pollutant: No
Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): 149, 383, B52, IB2, T4, TP1, TP8
DOT Label(s): 3
DOT Symbol: N/A
DOT Cargo Aircraft: N/A
DOT Passenger Aircraft: N/A
DOT Bulk: N/A
DOT Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR exempt: No
ADR-Label: 3
ADR - Hazard identification number: 33
ADR-Transport category (Tunnel restriction code): 2 (D/E)

Air (IATA):

IATA-Passenger Aircraft: 353
IATA-Cargo Aircraft: 364
IATA-Label: 3
IATA-Subsidiary hazards: -
IATA-Erg: 3L
IATA-Special Provisions: A3

Sea (IMDG):

IMDG-Stowage Code: Category B
IMDG-Stowage Note: -
IMDG-Subsidiary hazards: -
IMDG-Special Provisions: -
IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: F-E, S-E
IMDG-MFAG: N/A

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

Hexamethylene-1,6-diisocyanate Homopolymer	is listed in TSCA	Section 8b
N-butyl acetate	is listed in TSCA	Section 8b
Ethyl acetate	is listed in TSCA	Section 8b

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

No substances listed

Section 304 - Hazardous substances:

N-butyl acetate
Ethyl acetate

Section 313 - Toxic chemical list:

No substances listed

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

N-butyl acetate	Reportable quantity:	5000	pounds
Ethyl acetate	Reportable quantity:	5000	pounds
	Reportable quantity for mixture:	13513.51	pounds

CAA - Clean Air Act

CAA listed substances:

N-butyl acetate	is listed in CAA	Section 111
Ethyl acetate	is listed in CAA	Section 111

CWA - Clean Water Act

CWA listed substances:

N-butyl acetate	is listed in CWA	Section 304 Section 311
Ethyl acetate	is listed in CWA	Section 304

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

No substances listed

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

N-butyl acetate
Ethyl acetate

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

N-butyl acetate
Ethyl acetate

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

N-butyl acetate

16. OTHER INFORMATION

Code	Description
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

Code	Hazard class and hazard category	Description
A.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
A.3/2A	Eye Irrit. 2A	Eye irritation, Category 2A
A.4.2/1	Skin Sens. 1	Skin Sensitization, Category 1
A.8/3	STOT SE 3	Specific target organ toxicity following single exposure, Category 3
B.6/2	Flam. Liq. 2	Flammable Liquids — Category 2
B.6/3	Flam. Liq. 3	Flammable Liquids — Category 3

Safety Data Sheet dated: 5/3/2023 - version 1

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

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:

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

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

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).

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

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

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

GefStoffVO: Ordinance on Hazardous Substances, Germany.

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

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

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

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

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special conditions. In these special cases, we do not assume responsibility for the damage.



EXPOSURE SCENARIO: ETHYL ACETATE

Exposure scenario number: 2

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **Ethyl acetate**

CAS: 141-78-6 , EC: 205-500-4, INDEX: 607-022-00-5 e Nr. REACH: 01-2119475103-46-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives, hardeners and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	77°C (1.013 hPa)
Vapour pressure	98 hPa (20°C)
Biodegradation	Readily biodegradable (Method BOD)

Company data

Annual amount per site	1266901 Kg
Daily amount per site	5931.07 Kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness: 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness: 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 100 % (unless stated differently).

Environment factors

Emission or release factor in water	0%
Emission or release factor in soil	0%
Dimensions of receiving river	18.000 m3/day
Dilution factor river	10
Dilution factor coast	100

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
Flow rate of sewage treatment plant	2000 m ³ /day
Sludge Treatment	Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.

Ensure that transfers of material are subject to restraining measures or suction ventilation.

Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario: Distribution of substance

Main User Groups

SU3: Industrial uses

SU22: Professional uses

Process categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

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

PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental release categories

ERC1: Manufacture of the substance

2 - Short title of Exposure Scenario : Formulation & (re)packing of substances and mixtures

Main user groups

SU3: Industrial uses

Sector of end-use

SU10: Formulation

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

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

PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC2: Formulation into mixture

3 - Short title of exposure scenario: Use in paints and related products

Main users groups

SU3: Industrial uses

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC4: Chemical production where opportunity for exposure arises

PROC7: Industrial spraying

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

Environmental Release Categories

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

4 - Short title of exposure scenario: Use in paints and related products

Main user groups

SU22: Professional uses

Process Categories

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

PROC19: Manual activities involving hand contact

Environmental Release Categories

ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

Key

SU Sector of use category

PROC Process Categories

ERC Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario

ICA S.p.A. - Regulatory affairs

Data elaboration: 19/09/2019

Version 1



EXPOSURE SCENARIO: N-BUTYL ACETATE

Exposure scenario number: 1

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **N-butyl acetate**

CAS: 123-86-4 , EC: 204-658-1 , INDEX: 607-025-00-1 e Nr. REACH: 01-2119485493-29-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives, hardeners and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	125°C a 1.013 hPa
Vapour pressure	11.6 mbar a 20°C
Biodegradation	Readily biodegradable (Method OCSE 301D)

Company data

Annual amount per site	1762195 Kg
Daily amount per site	7498.70 Kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness: 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness: 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 100 % (unless stated differently).

Environment factors

Emission or release factor in water	0%
Emission or release factor in soil	0%
Dimensions of receiving river	18.000 m3/day
Dilution factor river	10
Dilution factor coast	100

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
Flow rate of sewage treatment plant	2000 m ³ /day
Sludge Treatment	Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.

Ensure that transfers of material are subject to restraining measures or suction ventilation.

Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario: Distribution of substance

Main User Groups

SU3: Industrial uses

SU22: Professional uses

Process categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

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

PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental release categories

ERC1: Manufacture of the substance

2 - Short title of Exposure Scenario : Formulation & (re)packing of substances and mixtures

Main user groups

SU3: Industrial uses

Sector of end-use

SU10: Formulation

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

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

PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC2: Formulation into mixture

3 - Short title of exposure scenario: Use in paints and related products

Main users groups

SU3: Industrial uses

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC4: Chemical production where opportunity for exposure arises

PROC7: Industrial spraying

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

Environmental Release Categories

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

4 - Breve titolo dello scenario d'esposizione: Utilizzo in vernici e prodotti correlati

Main user groups

SU22: Professional uses

Process Categories

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

PROC19: Manual activities involving hand contact

Environmental Release Categories

ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

Key

SU Sector of use category

PROC Process Categories

ERC Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario

ICA S.p.A. - Regulatory affairs

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