

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015**SECTION 1. IDENTIFICATION**

Product name : beta-CrossLaps CalCheck

Product code : 03140652122

Manufacturer or supplier's details

Company name of supplier : Roche Diagnostics

-

Address : 9115 Hague Road
Indianapolis, IN 46250
USA

Telephone : 1-800-428-5074

Emergency telephone

In case of emergencies: : CHEMTREC

1-800-424-9300 (U.S. or Canada)
1-703-527-3887 (International)**Recommended use of the chemical and restrictions on use**

Restrictions on use : For professional users only.

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section GHS Label elements contains the resulting labelling for the kit

GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H317 May cause an allergic skin reaction.

Precautionary Statements :

Prevention:

P261 Avoid breathing dust.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

attention.
P363 Wash contaminated clothing before reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Check 1 (low)****GHS Classification**

Combustible dust

Skin sensitization : Category 1

Chemical nature : Handle as potentially infectious.

Components

Chemical name	CAS-No.	Concentration (% w/w)
Edetic acid disodium salt dihydrate (EDTA-2Na-2H ₂ O)	6381-92-6	$\geq 1 - < 5$
3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1)	26172-54-3	$\geq 0.1 - < 1$

Actual concentration is withheld as a trade secret

Check 2 (medium)**GHS Classification**

Combustible dust

Skin sensitization : Category 1

Chemical nature : Handle as potentially infectious.

Components

Chemical name	CAS-No.	Concentration (% w/w)
Edetic acid disodium salt dihydrate (EDTA-2Na-2H ₂ O)	6381-92-6	$\geq 1 - < 5$
3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1)	26172-54-3	$\geq 0.1 - < 1$

Actual concentration is withheld as a trade secret

Check 3 (high)**GHS Classification**

Combustible dust

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Skin sensitization : Category 1

Chemical nature : Handle as potentially infectious.

Components

Chemical name	CAS-No.	Concentration (% w/w)
Edetic acid disodium salt dihydrate (EDTA-2Na-2H ₂ O)	6381-92-6	$\geq 1 - < 5$
3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1)	26172-54-3	$\geq 0.1 - < 1$

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this material safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Move to fresh air.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.

In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Rinse mouth with water.

Most important symptoms and effects, both acute and delayed : None known.

Notes to physician : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

- Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.
- Advice on safe handling : Avoid formation of respirable particles.
Do not breathe vapors/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage conditions : See label, package insert or internal guidelines

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Check 1 (low)****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

Check 2 (medium)**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

Check 3 (high)**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

Engineering measures : No data available

Personal protective equipment**Hand protection**

	In case of contact through splashing:
Material	: Nitrile rubber
Break through time	: > 30 min
Glove thickness	: > 0.11 mm

	In case of full contact:
Material	: butyl-rubber
Break through time	: > 480 min
Glove thickness	: > 0.4 mm

Remarks	: Wear appropriate protective gloves to prevent skin contact. Replace torn or punctured gloves promptly.
Eye protection	: Eye wash bottle with pure water Tightly fitting safety goggles
Skin and body protection	: Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	: Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**Check 1 (low)**

Appearance : (lyophilized)

Color : white

SAFETY DATA SHEET



beta-CrossLaps CalCheck

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

light yellow

Odor : none

Odor Threshold : Not applicable

pH : 7.0
(as aqueous solution)

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Evaporation rate : No data available

Flammability (solid, gas) : Sustains combustion

Flammability (liquids) : Sustains combustion

Self-ignition : No data available

Upper explosion limit / Upper
flammability limit : No data available

Lower explosion limit / Lower
flammability limit : No data available

Vapor pressure : No data available

Relative vapor density : Not applicable

Relative density : No data available

Solubility(ies)
Water solubility : completely soluble

Solubility in other solvents : No data available

Partition coefficient: n-
octanol/water : No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity
Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

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

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015**Check 2 (medium)**

Appearance	:	(lyophilized)
Color	:	white
		light yellow
Odor	:	none
Odor Threshold	:	Not applicable
pH	:	7.0 (as aqueous solution)
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	does not flash
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Sustains combustion
Flammability (liquids)	:	Sustains combustion
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	Not applicable
Relative density	:	No data available
Solubility(ies)		
Water solubility	:	completely soluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

Check 3 (high)

Appearance	:	(lyophilized)
Color	:	white
		light yellow
Odor	:	none
Odor Threshold	:	Not applicable
pH	:	7.0 (as aqueous solution)
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	does not flash
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Sustains combustion
Flammability (liquids)	:	Sustains combustion
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	Not applicable

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Relative density	:	No data available
Solubility(ies)		
Water solubility	:	completely soluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use. No decomposition if stored and applied as directed.
Conditions to avoid	:	Exposure to moisture.
Incompatible materials	:	Strong oxidizing agents

SECTION 11. TOXICOLOGICAL INFORMATION**Check 1 (low)****Acute toxicity**

Not classified based on available information.

Components:**Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**Acute oral toxicity : LD50 Oral (Rat, male and female): 2,800 mg/kg
Method: OECD Test Guideline 401Acute inhalation toxicity : Acute toxicity estimate: 1.6 mg/l
Test atmosphere: dust/mist
Method: Expert judgment**3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

- Acute oral toxicity : LD50 Oral (Rat, female): 175 mg/kg
Method: OECD Test Guideline 425
- Acute inhalation toxicity : LC50 (Rat, male and female): 0.11 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: Corrosive to the respiratory tract.
Remarks: Based on data from similar materials
- Acute dermal toxicity : LD50 Dermal (Rat, male): 246 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials

Skin corrosion/irritation

Not classified based on available information.

Components:**Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

- Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

- Species : reconstructed human epidermis (RhE)
Method : OECD Test Guideline 431
Result : Causes severe burns.

Serious eye damage/eye irritation

Not classified based on available information.

Components:**Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

- Species : Rabbit
Result : No eye irritation
Test substance : anhydrous substance
Remarks : Based on data from similar materials

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

- Result : Risk of serious damage to eyes.

Respiratory or skin sensitization**Skin sensitization**

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015**Components:****Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

Species : Guinea pig
Assessment : Does not cause skin sensitization.
Method : OECD Test Guideline 406

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

Test Type : Local lymph node assay (LLNA)
Method : OECD Test Guideline 429
Result : The product is a skin sensitizer, sub-category 1A.

Test Type : Maximization Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : positive
Remarks : Based on data from similar materials

Germ cell mutagenicity

Not classified based on available information.

Components:**3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster ovary cells
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

Test Type: unscheduled DNA synthesis assay
Species: Rat (male and female)
Application Route: Oral
Method: OECD Test Guideline 486
Result: negative

Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

beta-CrossLaps CalCheck

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Components:**3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**

Effects on fetal development : Species: Rat
Application Route: Oral
Dose: 40 mg/kg bw/day
Result: No effects on fetal development.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity**Components:****3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**

Species : Rat
NOEL : 94 mg/kg bw/day
Application Route : Oral
Exposure time : 90 d
Method : OECD Test Guideline 408
Remarks : No significant adverse effects were reported
No human information is available.

Species : Dog
NOAEL : 40.9 mg/kg bw/day
Application Route : Oral
Exposure time : 90 d
Method : OECD Test Guideline 409

Aspiration toxicity

Not classified based on available information.

Check 2 (medium)**Acute toxicity**

Not classified based on available information.

Components:**Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

Acute oral toxicity : LD₅₀ Oral (Rat, male and female): 2,800 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : Acute toxicity estimate: 1.6 mg/l

beta-CrossLaps CalCheck

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Test atmosphere: dust/mist
Method: Expert judgment

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

- Acute oral toxicity : LD50 Oral (Rat, female): 175 mg/kg
Method: OECD Test Guideline 425
- Acute inhalation toxicity : LC50 (Rat, male and female): 0.11 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: Corrosive to the respiratory tract.
Remarks: Based on data from similar materials
- Acute dermal toxicity : LD50 Dermal (Rat, male): 246 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials

Skin corrosion/irritation

Not classified based on available information.

Components:**Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

- Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

- Species : reconstructed human epidermis (RhE)
Method : OECD Test Guideline 431
Result : Causes severe burns.

Serious eye damage/eye irritation

Not classified based on available information.

Components:**Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

- Species : Rabbit
Result : No eye irritation
Test substance : anhydrous substance
Remarks : Based on data from similar materials

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

- Result : Risk of serious damage to eyes.

Respiratory or skin sensitization**Skin sensitization**

May cause an allergic skin reaction.

beta-CrossLaps CalCheck

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Respiratory sensitization

Not classified based on available information.

Components:
Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):

Species : Guinea pig
Assessment : Does not cause skin sensitization.
Method : OECD Test Guideline 406

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

Test Type : Local lymph node assay (LLNA)
Method : OECD Test Guideline 429
Result : The product is a skin sensitizer, sub-category 1A.

Test Type : Maximization Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : positive
Remarks : Based on data from similar materials

Germ cell mutagenicity

Not classified based on available information.

Components:
3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster ovary cells
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

Test Type: unscheduled DNA synthesis assay
Species: Rat (male and female)
Application Route: Oral
Method: OECD Test Guideline 486
Result: negative

Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

beta-CrossLaps CalCheck

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Components:**3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**

Effects on fetal development : Species: Rat
Application Route: Oral
Dose: 40 mg/kg bw/day
Result: No effects on fetal development.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity**Components:****3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**

Species : Rat
NOEL : 94 mg/kg bw/day
Application Route : Oral
Exposure time : 90 d
Method : OECD Test Guideline 408
Remarks : No significant adverse effects were reported
No human information is available.

Species : Dog
NOAEL : 40.9 mg/kg bw/day
Application Route : Oral
Exposure time : 90 d
Method : OECD Test Guideline 409

Aspiration toxicity

Not classified based on available information.

Check 3 (high)**Acute toxicity**

Not classified based on available information.

Components:**Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

Acute oral toxicity : LD50 Oral (Rat, male and female): 2,800 mg/kg

beta-CrossLaps CalCheck

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Method: OECD Test Guideline 401

Acute inhalation toxicity : Acute toxicity estimate: 1.6 mg/l
Test atmosphere: dust/mist
Method: Expert judgment

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

Acute oral toxicity : LD50 Oral (Rat, female): 175 mg/kg
Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat, male and female): 0.11 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: Corrosive to the respiratory tract.
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 Dermal (Rat, male): 246 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials

Skin corrosion/irritation

Not classified based on available information.

Components:**Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

Species : reconstructed human epidermis (RhE)
Method : OECD Test Guideline 431
Result : Causes severe burns.

Serious eye damage/eye irritation

Not classified based on available information.

Components:**Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

Species : Rabbit
Result : No eye irritation
Test substance : anhydrous substance
Remarks : Based on data from similar materials

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

Result : Risk of serious damage to eyes.

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015**Respiratory or skin sensitization****Skin sensitization**

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

Components:**Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

Species : Guinea pig
Assessment : Does not cause skin sensitization.
Method : OECD Test Guideline 406

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

Test Type : Local lymph node assay (LLNA)
Method : OECD Test Guideline 429
Result : The product is a skin sensitizer, sub-category 1A.

Test Type : Maximization Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : positive
Remarks : Based on data from similar materials

Germ cell mutagenicity

Not classified based on available information.

Components:**3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster ovary cells
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

Test Type: unscheduled DNA synthesis assay
Species: Rat (male and female)
Application Route: Oral
Method: OECD Test Guideline 486
Result: negative

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015**Carcinogenicity**

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.**Reproductive toxicity**

Not classified based on available information.

Components:**3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**

Effects on fetal development : Species: Rat
Application Route: Oral
Dose: 40 mg/kg bw/day
Result: No effects on fetal development.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity**Components:****3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**

Species : Rat
NOEL : 94 mg/kg bw/day
Application Route : Oral
Exposure time : 90 d
Method : OECD Test Guideline 408
Remarks : No significant adverse effects were reported
No human information is available.

Species : Dog
NOAEL : 40.9 mg/kg bw/day
Application Route : Oral
Exposure time : 90 d
Method : OECD Test Guideline 409

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION**Check 1 (low)**

beta-CrossLaps CalCheck

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Ecotoxicity**Components:****Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

- Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 41 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 140 mg/l
Exposure time: 48 h
Test Type: static test
Method: DIN 38412
- Toxicity to microorganisms : EC20 (activated sludge): > 500 mg/l
Exposure time: 0.5 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

Ecotoxicology Assessment

- Acute aquatic toxicity : This product has no known ecotoxicological effects.
- Chronic aquatic toxicity : This product has no known ecotoxicological effects.
- Toxicity Data on Soil : Not expected to adsorb on soil.
- Other organisms relevant to the environment : No data available

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.77 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.33 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.289 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.0442 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Persistence and degradability**Components:****Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Biodegradability : Result: Not readily biodegradable.

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

Biodegradability : aerobic
Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Bioaccumulative potential**Components:****Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**Partition coefficient: n- : Remarks: No data available
octanol/water**3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <= 4).

Partition coefficient: n- : log Pow: ca. -0.44 (68 °F / 20 °C)
octanol/water Method: OECD Test Guideline 107**Mobility in soil**

No data available

Other adverse effects**Check 2 (medium)****Ecotoxicity****Components:****Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 41 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 140 mg/l
aquatic invertebrates Exposure time: 48 h
Test Type: static test
Method: DIN 38412

Toxicity to microorganisms : EC20 (activated sludge): > 500 mg/l
Exposure time: 0.5 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to
the environment : No data available**3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.77 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: OECD Test Guideline 203Toxicity to daphnia and other
aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.33 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202Toxicity to algae/aquatic
plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.289
mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201Toxicity to daphnia and other
aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.0442 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211**Persistence and degradability****Components:****Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

Biodegradability : Result: Not readily biodegradable.

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):Biodegradability : aerobic
Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301B**Bioaccumulative potential****Components:****Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**Partition coefficient: n- : Remarks: No data available
octanol/water**3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):**

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <= 4).

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Partition coefficient: n-
octanol/water : log Pow: ca. -0.44 (68 °F / 20 °C)
Method: OECD Test Guideline 107

Mobility in soil

No data available

Other adverse effects**Check 3 (high)****Ecotoxicity****Components:****Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 41 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 140 mg/l
aquatic invertebrates : Exposure time: 48 h
Test Type: static test
Method: DIN 38412

Toxicity to microorganisms : EC20 (activated sludge): > 500 mg/l
Exposure time: 0.5 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to : No data available
the environment

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.77 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: OECD Test Guideline 203

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 2.33 mg/l
aquatic invertebrates : Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Toxicity to algae/aquatic : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.289
plants : mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.0442 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Persistence and degradability**Components:****Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

Biodegradability : Result: Not readily biodegradable.

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

Biodegradability : aerobic
Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Bioaccumulative potential**Components:****Edetic acid disodium salt dihydrate (EDTA-2Na-2H₂O):**

Partition coefficient: n-octanol/water : Remarks: No data available

3(2H)-Isothiazolone, 2-methyl-, hydrochloride (1:1):

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <= 4).

Partition coefficient: n-octanol/water : log Pow: ca. -0.44 (68 °F / 20 °C)
Method: OECD Test Guideline 107

Mobility in soil

No data available

Other adverse effects

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Special treatment as infectious material is mandatory in compliance with local regulations (disinfection and incineration).
The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
Can be disposed as waste water, when in compliance with local regulations.

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**International Regulations****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Domestic regulation**49 CFR**

Not regulated as a dangerous good

Special precautions for user

Remarks : Not dangerous goods in the meaning of ADR/RID, ADN,
IMDG-Code, ICAO/IATA-DGR

SECTION 15. REGULATORY INFORMATION**Check 1 (low)****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards

: Combustible dust
Respiratory or skin sensitization

SARA 313

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

beta-CrossLaps CalCheck

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations
Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Human serum /-plasma / -hemolysate, lyophilized Not Assigned

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

The ingredients of this product are reported in the following inventories:

AIIC	: Not in compliance with the inventory
DSL	: This product contains the following components that are not on the Canadian DSL nor NDSL. Human serum /-plasma / -hemolysate, lyophilized hydroxyl-2-pyridone
NZIoC	: Not in compliance with the inventory
ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: Not in compliance with the inventory
TCSI	: Not in compliance with the inventory
TSCA	: Product contains substance(s) not listed on TSCA inventory.

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

TECI : Not in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Check 2 (medium)**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Combustible dust
Respiratory or skin sensitization**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.**Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Human serum /-plasma / -hemolysate, lyophilized

Not Assigned

Maine Chemicals of High Concern

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

The ingredients of this product are reported in the following inventories:

AIIC	: Not in compliance with the inventory
DSL	: This product contains the following components that are not on the Canadian DSL nor NDSL. Human serum /-plasma / -hemolysate, lyophilized hydroxyl-2-pyridone
NZIoC	: Not in compliance with the inventory
ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: Not in compliance with the inventory
TCSI	: Not in compliance with the inventory
TSCA	: Product contains substance(s) not listed on TSCA inventory.
TECI	: Not in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Check 3 (high)**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Combustible dust
Respiratory or skin sensitization

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Human serum /-plasma / -hemolysate, lyophilized Not Assigned

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

The ingredients of this product are reported in the following inventories:

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.

Human serum /-plasma / -hemolysate, lyophilized

hydroxyl-2-pyridone

NZIoC : Not in compliance with the inventory

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

beta-CrossLaps CalCheck

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
TCSI	:	Not in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
TECI	:	Not in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Check 1 (low)
GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements : May form combustible dust concentrations in air.
H317 May cause an allergic skin reaction.

Precautionary Statements :

Prevention:
P261 Avoid breathing dust.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Check 2 (medium)

beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015**GHS label elements**

Hazard pictograms :



Signal Word : Warning

Hazard Statements : May form combustible dust concentrations in air.
H317 May cause an allergic skin reaction.

Precautionary Statements :

Prevention:
P261 Avoid breathing dust.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Check 3 (high)**GHS label elements**

Hazard pictograms :



Signal Word : Warning

Hazard Statements : May form combustible dust concentrations in air.
H317 May cause an allergic skin reaction.

Precautionary Statements :

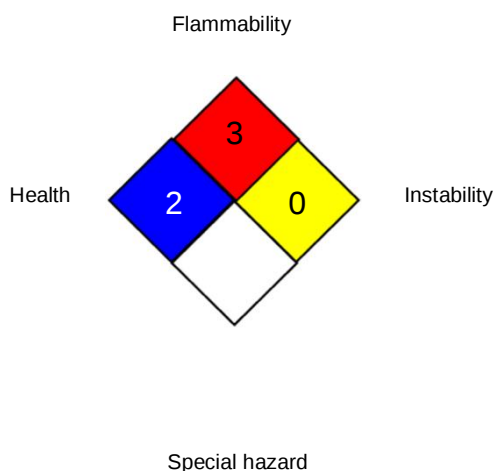
Prevention:
P261 Avoid breathing dust.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.

Disposal:

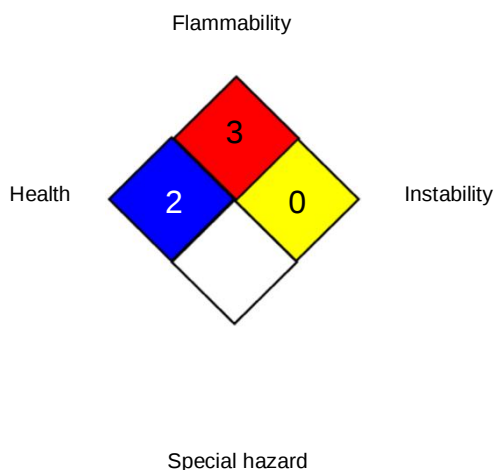
beta-CrossLaps CalCheckVersion
3.0Revision Date:
03-16-2022Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 16. OTHER INFORMATION**Further information****NFPA 704:****HMIS® IV:**

HEALTH	/	2
FLAMMABILITY		3
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

NFPA 704:**HMIS® IV:**

HEALTH	/	2
FLAMMABILITY		3
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

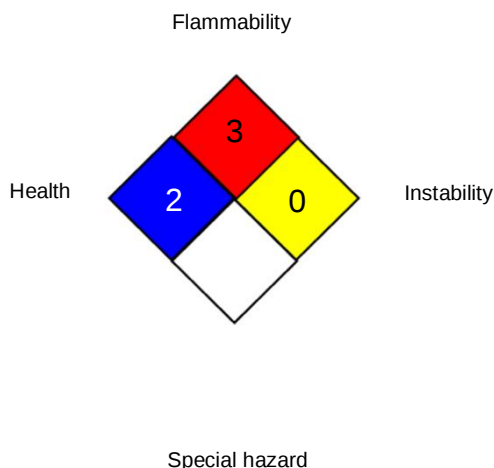
beta-CrossLaps CalCheck

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

NFPA 704:



HMIS® IV:

HEALTH	/	2
FLAMMABILITY		3
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; 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; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; 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; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

SAFETY DATA SHEET



beta-CrossLaps CalCheck

Version
3.0

Revision Date:
03-16-2022

Date of last issue: 10-09-2021
Date of first issue: 11-11-2015

Revision Date : 03-16-2022

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / Z8 / 2104