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A Geno Technology, Inc. (USA) brand name

Safety Data Sheet

Co-NTA Resin

Cat. # 786-935



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www.GBiosciences.com



Co-NTA Resin

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 2/25/2015 Revision date: 11/24/2025 Supersedes: 10/30/2025 Version: 12.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : Co-NTA Resin
Product code : 221C_223C_224C_225C_226C

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Research and development

1.4. Supplier's details

G-Biosciences/ Geno Technology, Inc.
9800 Page Avenue
St. Louis, MO 63132-1429, USA
Tel.1-800-628-7730
www.GBiosciences.com

1.5. Emergency phone number

Emergency number : Chemtrec **1-800-424-9300** (USA/Canada), **+1-703-527-3887** (Intl)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

| | | |
|---|------|--|
| Flammable liquid, Category 2 | H225 | Highly flammable liquid and vapor. |
| Respiratory sensitization, Category 1 | H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin sensitization, Category 1 | H317 | May cause an allergic skin reaction. |
| Germ cell mutagenicity, Category 2 | H341 | Suspected of causing genetic defects. |
| Carcinogenicity, Category 1A | H350 | May cause cancer. |
| Hazardous to the aquatic environment — Acute Hazard, Category 3 | H402 | Harmful to aquatic life. |
| Hazardous to the aquatic environment — Chronic Hazard, Category 3 | H412 | Harmful to aquatic life with long lasting effects. |

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : H225 - Highly flammable liquid and vapor
H317 - May cause an allergic skin reaction
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H341 - Suspected of causing genetic defects.
H350 - May cause cancer.

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Precautionary statements (GHS US)

H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects
: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof equipment.
P242 - Use non-sparking tools.
P243 - Take action to prevent static discharges.
P261 - Avoid breathing dust, fume, gas, mist, vapors, spray.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
P284 - Wear respiratory 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.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.
P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use appropriate media to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

| Name | Common Name (Synonyms) | Product identifier | % | GHS US classification |
|---------|--|--------------------|---------|--------------------------------------|
| ethanol | 1-hydroxyethane / absolute alcohol / absolute ethanol / alcohol / alcohol 200 proof / alcohol C2 / alcohol, absolute / alcohol, anhydrous / alcohol, dehydrated / algrain / anhydrol / anydrol / APEXA / bioethanol / BIO-Fire / cologne spirit / cologne spirits / ECO-Fire / ethanol / ethanol 200 proof / ethanol, absolute / ethicap / ethyl alcohol / ethyl alcohol, anhydrous / ethyl hydrate / ethyl hydroxide / ethylic alcohol / fermentation alcohol / grain alcohol / hydrated oxide of ethyl / IMS grades (=ethanol) / industrial alcohol / jaysol / jaysol S / methyl carbinol / methylated spirit (=ethanol) / molasses alcohol / neutral spirits / potable spirits / potato alcohol / proof spirits / rectified spiritus / SD alcohol 23-hydrogen / silent spirit / spirit / spirit of wine / spirits of wine / tecsol / Tecsol C | CAS-No.: 64-17-5 | 10 – 50 | Flam. Liq. 2, H225 Carc. 1A, H350 |

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| Name | Common Name (Synonyms) | Product identifier | % | GHS US classification |
|--|--|---------------------|-----|---|
| cobalt(II)sulfate, heptahydrate (Note 1) | cobalt sulfate, heptahydrate / cobalt sulphate, heptahydrate / cobaltous sulfate, heptahydrate / sulfuric acid, cobalt(II)salt, heptahydrate | CAS-No.: 10026-24-1 | < 2 | Acute Tox. 4 (Oral), H302 Resp. Sens. 1, H334 Skin Sens. 1, H317 Muta. 2, H341 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

Note 1: Note 1 : The concentration stated or, in the absence of such concentrations, the generic concentrations set out in this Regulation are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. If experiencing respiratory symptoms: Call a poison center or a doctor. |
| First-aid measures after skin contact | : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution. |
| First-aid measures after ingestion | : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center/doctor/physician if you feel unwell. |
| Self protection of the first-aider | : First aid workers will be equipped with suitable personal protective equipment. |

4.2. Most important symptoms/effects, acute and delayed

| | |
|---|---|
| Potential Adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. |
| Symptoms/effects | : Suspected of causing genetic defects. |
| Symptoms/effects after inhalation | : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause cancer by inhalation. |
| Symptoms/effects after skin contact | : May cause an allergic skin reaction. |
| Symptoms/effects after eye contact | : None under normal conditions. |
| Symptoms/effects after ingestion | : None under normal conditions. |
| Chronic symptoms | : May damage fertility or the unborn child. |

4.3. Indication of immediate medical attention and special treatment needed, if necessary

| | |
|-----------------------------------|--------------------------|
| Other medical advice or treatment | : Treat symptomatically. |
|-----------------------------------|--------------------------|

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : May form flammable/explosive vapor-air mixture.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene. Avoid breathing dust/fume/gas/mist/vapors/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Ventilate area. Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

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SECTION 7 Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools. Avoid breathing dust/fume/gas/mist/vapors/spray. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes.
- Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

7.2. Conditions for safe storage, including incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.
- Storage conditions : Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well ventilated place away from : Keep in fireproof place. Keep container tightly closed. Store locked up.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.
- Storage temperature : 4 °C
- Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

| ethanol (64-17-5) | |
|--|--|
| USA - ACGIH - Occupational Exposure Limits | |
| ACGIH® TLV® STEL | 1000 ppm |
| USA - Cal/OSHA - Occupational Exposure Limits | |
| Local name | Ethyl alcohol; ethanol |
| Cal/OSHA PEL (OEL TWA) | 1900 mg/m ³ |
| | 1000 ppm |
| Regulatory reference | California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1) |
| USA - NIOSH - Occupational Exposure Limits | |
| Local name | Ethyl alcohol (Ethanol) |
| NIOSH REL 10h TWA | 1000 ppm |
| Regulatory reference (US-NIOSH) | OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG)) |

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cobalt(II)sulfate, heptahydrate (10026-24-1)

USA - ACGIH - Occupational Exposure Limits

| | |
|-----------------|---|
| ACGIH® TLV® TWA | 0.02 mg/m ³ (Inhalable fraction) |
|-----------------|---|

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Protective gloves. Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses. Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. In case of inadequate ventilation wear respiratory protection. [In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

| | |
|---|--|
| Physical state | : Liquid |
| Color | : pink |
| Odor | : characteristic |
| Odor threshold | : No data available |
| pH | : No data available |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : 65 °C |
| Flammability (solid, gas) | : Not applicable. Highly flammable liquid and vapor. |
| Vapor pressure | : No data available |
| Relative vapor density at 20°C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |

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Viscosity, kinematic : No data available
Explosion limits : No data available
Particle characteristics : No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions. Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures. Open flame. Heat.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products. fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| ethanol (64-17-5) | |
|--------------------------------|--|
| LD50 oral rat | 10470 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s)) |
| LD50 oral | 8300 mg/kg body weight Animal: mouse |
| LD50 dermal rabbit | > 15800 mg/kg body weight (Rabbit, Experimental value, Dermal) |
| LC50 Inhalation - Rat | 124.7 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s)) |
| LC50 Inhalation - Rat (Vapors) | 116.9 mg/l Source: ECHA |
| ATE US (oral) | 10470 mg/kg body weight |
| ATE US (vapors) | 116.9 mg/l/4h |
| ATE US (dust, mist) | 124.7 mg/l/4h |

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| cobalt(II)sulfate, heptahydrate (10026-24-1) | |
|---|---|
| LD50 oral rat | 424 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 10 day(s)) |
| LD50 dermal rat | > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 15 day(s)) |
| ATE US (oral) | 424 mg/kg body weight |

Skin corrosion/irritation : Not classified

| ethanol (64-17-5) | |
|--------------------------|--------------------|
| pH | 7 (789 g/l, 20 °C) |

Serious eye damage/irritation : Not classified

| ethanol (64-17-5) | |
|--------------------------|--------------------|
| pH | 7 (789 g/l, 20 °C) |

Respiratory or skin sensitization : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity : Suspected of causing genetic defects.

Carcinogenicity : May cause cancer.

| ethanol (64-17-5) | |
|--------------------------|----------------------------|
| IARC group | 1 - Carcinogenic to humans |

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

| ethanol (64-17-5) | |
|---|---|
| LOAEL (oral,rat,90 days) | 3200 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents) |
| NOAEL (oral,rat,90 days) | 1730 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other: |
| NOAEL (subchronic,oral,animal/male,90 days) | < 9700 mg/kg body weight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents) |
| NOAEL (subchronic,oral,animal/female,90 days) | > 9400 mg/kg body weight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents) |

Aspiration hazard : Not classified

| ethanol (64-17-5) | |
|--------------------------|--------------------------------|
| Viscosity, kinematic | 1.6 mm ² /s (20 °C) |

| cobalt(II)sulfate, heptahydrate (10026-24-1) | |
|---|----------------|
| Viscosity, kinematic | Not applicable |

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects : Suspected of causing genetic defects.

Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause cancer by inhalation.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : None under normal conditions.

Symptoms/effects after ingestion : None under normal conditions.

Chronic symptoms : May damage fertility or the unborn child.

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SECTION 12 Ecological information

12.1. Ecotoxicity

| | |
|---|--|
| Ecology - general | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. Harmful to aquatic life. Harmful to aquatic life with long lasting effects. |
| Ecology - water | : Harmful to aquatic life. Harmful to aquatic life with long lasting effects. |
| Hazardous to the aquatic environment, short-term (acute) | : Harmful to aquatic life. |
| Hazardous to the aquatic environment, long-term (chronic) | : Harmful to aquatic life with long lasting effects. |

| ethanol (64-17-5) | |
|----------------------|--|
| LC50 - Fish [1] | 15300 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal) |
| EC50 - Crustacea [1] | 9300 mg/l (48 h, Daphnia magna, Pure substance) |
| EC50 72h - Algae [1] | 275 mg/l (Equivalent or similar to OECD 201, Chlorella vulgaris, Static system, Fresh water, Experimental value, Growth rate) |
| EC50 96h - Algae [1] | ≈ 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| ErC50 algae | 275 mg/l Source: ECHA |
| NOEC (chronic) | 9.6 mg/l Test organisms (species): Daphnia magna Duration: '9 d' |

| cobalt(II)sulfate, heptahydrate (10026-24-1) | |
|--|--|
| LC50 - Fish [1] | 1.512 mg/l (ASTM, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across, Anhydrous form) |
| ErC50 algae | 0.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Anhydrous form) |

12.2. Persistence and degradability

| Co-NTA Resin | |
|-------------------------------|---|
| Persistence and degradability | May cause long-term adverse effects in the environment. |

| ethanol (64-17-5) | |
|---------------------------------|---|
| Persistence and degradability | Not established. |
| Biochemical oxygen demand (BOD) | 0.8 – 0.967 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 1.7 g O ₂ /g substance |
| ThOD | 2.1 g O ₂ /g substance |
| BOD (% of ThOD) | 0.43 |

| cobalt(II)sulfate, heptahydrate (10026-24-1) | |
|--|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |

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12.3. Bioaccumulative potential

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| | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |
|---------------------------|------------------|

ethanol (64-17-5)

| | |
|---|--|
| Partition coefficient n-octanol/water (Log Pow) | -0.35 (Experimental value, Equivalent or similar to OECD 107, 24 °C) |
|---|--|

| | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |
|---------------------------|------------------|

cobalt(II)sulfate, heptahydrate (10026-24-1)

| | |
|-----------------------------------|--|
| BCF - Other aquatic organisms [1] | 2240 (3 day(s), Cyclotella, Static system, Fresh water, Read-across, Anhydrous form) |
|-----------------------------------|--|

| | |
|---------------------------|--|
| Bioaccumulative potential | Potential for bioaccumulation ($500 \leq \text{BCF} \leq 5000$). |
|---------------------------|--|

12.4. Mobility in soil

ethanol (64-17-5)

| | |
|-----------------|---------------------------|
| Surface tension | 22.31 mN/m (20 °C, 100 %) |
|-----------------|---------------------------|

| | |
|--|-----------------------------------|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 0.2 (log Koc, Experimental value) |
|--|-----------------------------------|

| | |
|----------------|------------------------|
| Ecology - soil | Highly mobile in soil. |
|----------------|------------------------|

cobalt(II)sulfate, heptahydrate (10026-24-1)

| | |
|----------------|---|
| Ecology - soil | No (test)data on mobility of the substance available. |
|----------------|---|

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No
Other information : Avoid release to the environment.

SECTION 13 Disposal considerations

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Waste treatment methods.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Disposal must be done according to official regulations.
Additional information : Handle empty containers with care because residual vapors are flammable. Flammable vapors may accumulate in the container. Do not re-use empty containers.
Ecological waste information : Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / TDG / IATA

14.1. UN number

Not regulated for transport

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14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Not regulated
Proper Shipping Name (TDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

TDG
Transport hazard class(es) (TDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

14.4. Packing group

Packing group (DOT) : Not regulated
Packing group (TDG) : Not regulated
Packing group (IATA) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IATA
Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

| Name | CAS-No. | Listing | Commercial status | Flags |
|---------------------------------|------------|-------------|-------------------|-------|
| ethanol | 64-17-5 | Present | | |
| cobalt(II)sulfate, heptahydrate | 10026-24-1 | Not present | - | |

15.2. International regulations

CANADA

ethanol (64-17-5)

Listed on the Canadian DSL (Domestic Substances List)

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EU-Regulations

No additional information available

National regulations

| ethanol (64-17-5) |
|--|
| Listed on IARC (International Agency for Research on Cancer) Listed on INSQ (Mexican National Inventory of Chemical Substances) |

| cobalt(II)sulfate, heptahydrate (10026-24-1) |
|--|
| Listed on IARC (International Agency for Research on Cancer) |

15.3. State regulations

| cobalt(II)sulfate, heptahydrate (10026-24-1) | | | | | |
|---|---|---|---|----------------------------------|-------------------------------------|
| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No significant risk level (NSRL) | Maximum allowable dose level (MADL) |
| Yes | No | No | No | | |

SECTION 16 Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 11/24/2025
Date of issue : 2/25/2015
Other information : None.

| Full text of hazard classes and H-statements | |
|--|---|
| H225 | Highly flammable liquid and vapor |
| H302 | Harmful if swallowed |
| H317 | May cause an allergic skin reaction |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |
| H400 | Very toxic to aquatic life |
| H402 | Harmful to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |
| H412 | Harmful to aquatic life with long lasting effects |

| Abbreviations and acronyms | |
|----------------------------|---|
| ACGIH | American Conference of Government Industrial Hygienists |
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |

Co-NTA Resin

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| Abbreviations and acronyms | |
|----------------------------|--|
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| CAS-No. | Chemical Abstract Service number |
| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| COD | Chemical oxygen demand (COD) |
| CSA | Chemical safety assessment |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| ED | Endocrine disruptor |
| EN | European Standard |
| EWC | European waste catalogue |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| Log Kow | Partition coefficient n-octanol/water (Log Kow) |
| Log Pow | Partition coefficient n-octanol/water (Log Pow) |
| MAK | maximum workplace concentration |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| N.O.S. | Not Otherwise Specified |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| OSHA | Occupational Safety & Health Administration |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| PPE | Personal protection equipment |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |

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| Abbreviations and acronyms | |
|----------------------------|--|
| TF | Technical function |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| TWA | Time Weighted Average |
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and Very Bioaccumulative |
| UFI | Unique Formula Identifier |

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.