EDTA-Na2
Safety Data Sheet

Version 1.1
Revision date12/05/2011/JK-IA

SECTION 1. Product and company identification

Chemical type	:	Substance
Substance name	:	EDTA-Na2
CAS No.	:	6381-92-6
Product code	:	786-050
Formula	:	C10H14N2Na2O8.2H2O
Synonyms	:	(ethylenedinitrilo)tetraacetic acid disodium salt, dihydrate / acetic acid(ethylenedinitrilo)tetra-, disodium salt, dihydrate / CHELEST F-NA / disodium edetate, dihydrate / disodium EDTA, dihydrate / disodium(ethylenedinitrilo)tetraacetic acid, dihydrate / disodiumethylenediamine tetraacetic acid, dihydrate / EDTA disodium salt, dihydrate / EDTA disodium salt, dihydrate, crystal / EDTA disodium, dihydrate / EDTA Na2, dihydrate / ethylenediamine tetraacetic acid disodium salt, dihydrate / glycine, N,N'-1,2-ethanediylbis(N-(carboxymethyl)-,disodium salt, dihydrate / IDRANOL III / N,N'-1,2-ethanediyl-bis(N(carboxymethyl)glycine)disodium salt, dihydrate / SEQUESTRENE Na2, dihydrate / TITRIPLEX III, dihydrate
Company identification	:	G-Biosciences/ Geno Technology, Inc. 9800 Page Avenue St. Louis, MO 63132-1429, USA Tel.1-800-628-7730 http://www.GBiosciences.com
Emergency number	:	Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887

SECTION: 2. Hazards identification

2.1. Emergency Overview

Physical State	:	Solid
Appearance	:	Crystalline solid. Crystalline powder
Colour	:	White
Odour	:	Odourless

EDTA-Na2 (\f)6381-92-6

2.2. OSHA Regulatory Status

No additional information available

2.3. Potential health effects

Symptoms/injuries after inhalation	:	AFTER INHALATION OF DUST: Dry/sore throat. Coughing.
Symptoms/injuries after ingestion	:	AFTER ABSORPTION OF HIGH QUANTITIES: Gastrointestinal complaints. Change in the haemogramme/blood composition.

2.4. Potential environmental effects

No additional information available

SECTION: 3. Composition/information on ingredients

Name	CAS No.	%
EDTA-Na2	6381-92-6	100

4.1. First aid procedures

First-aid measures general	:	Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
First-aid measures after inhalation	:	Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact	:	Rinse with water. Soap may be used. Take victim to a doctor if irritation persists.
First-aid measures after eye contact	:	Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.
First-aid measures after ingestion	:	Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Call Poison Information Centre (www.big.be/antigif.htm). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

4.2. Note to physicians

No additional information available

SECTION: 5. Firefighting measures

5.1. Flammable properties

Fire hazard	:	DIRECT FIRE HAZARD. Most organic solids may burn if strongly heated. INDIRECT FIRE HAZARD. Reactions involving a fire hazard: see "Reactivity Hazard".
Explosion hazard	:	DIRECT EXPLOSION HAZARD. Most organic solids are liable to dust explosion hazard. INDIRECT EXPLOSION HAZARD. Dust cloud can be ignited by a spark. Reactions with explosion hazards: see "Reactivity Hazard".
Reactivity	:	Reacts on exposure to water (moisture) with (some) metals: release of highly flammable gases/vapours (hydrogen). On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

5.1. Extinguishing media

Suitable extinguishing media	:	Water. Water spray. Polyvalent foam. ABC powder. Carbon dioxide.

5.3. Protection for firefighters

Firefighting instructions	:	Dilute toxic gases with water spray. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.
Protection during firefighting	:	Heat/fire exposure: compressed air/oxygen apparatus.

SECTION: 6. Accidental release measures

6.1. Personal precautions

6.1.1. For non-emergency personnel

Protective equipment	:	Gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. See "Material-Handling" to select protective clothing.
Emergency procedures	:	Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods for containment

For containment	:	Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust cloud with water spray. Hazardous reaction: measure explosive gas-air mixture. Reaction: dilute combustible gas/vapour with water curtain.

6.4. Methods for clean up

Methods for cleaning up	:	Stop dust cloud by covering with sand/earth. Scoop solid spill into closing containers. See "Material-handling" for suitable container materials. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.5. Other information

No additional information available

6.6. Spill or leak statements by type of chemical

No additional information available

SECTION: 7. Handling and storage

7.1. Handling

Precautions for safe handling	:	Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Powdered form: no compressed air for pumping over. Avoid raising dust. Keep away from naked flames/heat. Finely divided: spark- and explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

7.2. Storage

Storage temperature	:	15 - 25 °C
Heat-ignition	:	KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
Prohibitions on mixed storage	:	KEEP SUBSTANCE AWAY FROM: metals. water/moisture.
Storage area	:	Store in a dry area. Provide the tank with earthing. Meet the legal requirements.
Special rules on packaging	:	SPECIAL REQUIREMENTS: closing. watertight. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	:	SUITABLE MATERIAL: synthetic material. glass. MATERIAL TO AVOID: metal.

SECTION: 8. Exposure controls/personal protection

8.1. Exposure guidelines

No additional information available

8.2. Engineering controls

No additional information available

8.3. Personal protective equipment (PPE)

Materials for protective clothing	:	GIVE GOOD RESISTANCE: rubber. neoprene.
Hand protection	:	Gloves.
Eye protection	:	Safety glasses. In case of dust production: protective goggles.
Skin and body protection	:	Protective clothing.
Respiratory protection	:	Dust production: dust mask with filter type P1.

SECTION: 9. Physical and chemical properties

Physical state	:	Solid
Appearance	:	Crystalline solid. Crystalline powder.
Molecular mass	:	372.24 g/mol
Colour	:	White.
Odour	:	Odourless.
Odour threshold	:	No data available
pH	:	4 - 5
pH solution	:	5 %
Melting point	:	No data available
Solidification point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Flammability (solid, gas)	:	No data available
Explosive limits	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Solubility	:	Soluble in water. Water: > 10 g/100ml
Log Pow	:	No data available
Self ignition temperature	:	No data available
Decomposition temperature	:	> 246 °C
Viscosity	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
VOC content	:	0 %
Other properties	:	Hygroscopic. Substance has acid reaction.

SECTION: 10. Stability and reactivity

10.1. Chemical stability

Reacts on exposure to water (moisture) with (some) metals: release of highly flammable gases/vapours (hydrogen). On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

Hygroscopic.

10.2. Conditions to avoid

No additional information available

10.3. Incompatible materials

No additional information available

10.4. Hazardous decomposition products

No additional information available

10.5. Possibility of hazardous reactions

No additional information available

SECTION: 11. Toxicological information

Information on toxicological effects

Acute toxicity : Not classified

EDTA-Na2 (6381-92-6)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg

Skin corrosion/irritation : Not classified
pH: 4 - 5

Serious eye damage/irritation : Not classified
pH: 4 - 5

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION: 12. Ecological information

12.1 Ecotoxicity

Ecology - air : Not dangerous for the ozone layer (Council Regulation (EC) no 1005/2009).

EDTA-Na2 (\f)6381-92-6	
LC50 fishes 1	320 mg/l (96 Hours; POECILIA RETICULATA; ANHYDROUS FORM)
EC50 Daphnia 1	> 100 mg/l (24 Hours; DAPHNIA MAGNA)
LC50 fishes 2	1827 mg/l (96 Hours; LEPOMIS MACROCHIRUS; ANHYDROUS FORM)
EC50 other aquatic organisms 2	403 mg/l (3 Hours; ACTIVATED SLUDGE; ANHYDROUS FORM)

12.2. 12.2. Persistence and degradability

EDTA-Na2 (\f)6381-92-6	
Persistence and degradability	Not readily biodegradable in water. test: 81 %, OECD 302B Zahn- Well.
Biochemical oxygen demand (BOD)	0.01 g O^2/g substance

12.3. Bioaccumulation/Accumulation

EDTA-Na2 (\f)6381-92-6	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in environmental media

No additional information available

12.6. Other adverse effects

No additional information available

SECTION: 13. Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dissolve or mix with a combustible solvent. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

SECTION: 14. Transport information

14.1. Basic shipping description

No additional information available

14.2 Additional information

Other information : No supplementary information available.

State during transport (ADR-RID) : Rail and road transport: not subject to ADR-RID.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION: 15. Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. Not classified (Oral)
Acute Tox. Not classified (Dermal)
Aquatic Acute Not classified

Full text of H-phrases: see section 16.

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION: 16. Other information

HMIS III Rating

No additional information available

SDS US (ANSI) GBiosciences