

SECTION 1: Kit identification

D-3-Hydroxybutyric Acid Assay Kit

Kit SIS (Safety Information Sheet)

Issue date (US):12/15/2017 Revision date (US):4/11/2022 Supersedes (US):12/15/2017 Version (US):1.1

1.1. Kit identifier							
Product name	· D_3-H	ydroxybutyric Aci	d Assav Kit				
Product code	: K-HDE	, , ,	a Assay Nit				
1.2. Details of the sup	1.2. Details of the supplier of the Kit safety information sheet						
Megazyme Bray Business Park A98 YV29 Bray - Ireland T +353 12861220 - F +353 1 <u>cs@megazyme.com</u> - <u>www.r</u>							
SECTION 2: General i	information						
This product is a Kit which co	onsists of several independent	ly packaged com	ponents				
This Kit should be handled in	accordance with good labora	tory practices and	appropriate personal	protective equipment should be used			
SECTION 3: Kit conte	nts						
Name	General description	Quantity	Unit	GHS US classification			
D-3-Hydroxybutyric Acid	Buffer	1	pcs (pieces)	Eye Irrit. 2, H319			
Assay Kit (Bottle 1)			السلبية واوارد	Aquatic Acute 3, H402 Aquatic Chronic 3, H412			
D-3-Hydroxybutyric Acid Assay Kit (Bottle 4)	Reagent	EP	pcs (pieces)	Resp. Sens. 1, H334			
Name	General description	Quantity	Unit	GHS US classification			
D-3-Hydroxybutyric Acid Assay Kit (Bottle 2)	Reagent	2	pcs (pieces)	Not classified			
D-3-Hydroxybutyric Acid Assay Kit (Bottle 3)	Reagent	1	pcs (pieces)	Not classified			
D-3-Hydroxybutyric Acid Assay Kit (Bottle 5)	Reagent	1	pcs (pieces)	Not classified			
SECTION 4: General a	advice						
No data available							
SECTION 5: Safe han	dling advice						
	V						
Environmental precautions Storage conditions		release to the envin a well-ventilate					
	Keep						
Precautions for safe handling		e good ventilation personal protectiv	of the work station ve equipment				
SECTION 6: First aid	measures						
First-aid measures after eye	contact : Rinse	eyes with water a	as a precaution				
First-aid measures after inge		-	ctor/physician if you fe	eel unwell			
First-aid measures after inha			n air and keep comfort				
First-aid measures after skin		skin with plenty o		·			
Other medical advice or treat	Other medical advice or treatment : Treat symptomatically						
SECTION 7: Fire fight	ing measures						
Protection during firefighting : Do not attempt to take action without suitable protective equipment Self-contained breathing apparatus							
21/05/2022	EN (Eng	lish US)			1/29		
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D-3-Hydroxybutyric Acid Assay Kit

Kit SIS (Safety Information Sheet)

Hazardous decomposition products in case of fire

Complete protective clothing : Toxic fumes may be released

SECTION 8: Other information

No data available





Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 12/15/2017 Revision date: 03/14/2022 Supersedes: 12/15/2017 Version: 1.0

SECTIC	ON 1: Identification	
	Identification	
Product fo		Mixture
Product na		D-3-Hydroxybutyric Acid Assay Kit (Bottle 5)
Product co		K-HDBA (Bottle 5)
1.2.	Recommended use and restrictions or	n use
Use of the	substance/mixture :	Use as laboratory reagent
1.3.	Supplier	
Manufact Megazym Bray Busi Bray, A98 T +353 12	urer	
1.4.	Emergency telephone number	
Emergeno	cy number :	+353 12861220 [9 am to 5 pm GMT - Monday to Friday]
SECTIC	N 2: Hazard(s) identification	
2.1.	Classification of the substance or mix	ture
GHS US of Not classi	classification fied	
2.2.	GHS Label elements, including precau	itionary statements
GHS US I No labelin	abeling g applicable	とと単粒
2.3.	Other hazards which do not result in c	lassification
No additio	onal information available	
2.4.	Unknown acute toxicity (GHS US)	
Not applic	able	
SECTIC	ON 3: Composition/Information	on ingredients
3.1.	Substances	
Not applic	able	
3.2.	Mixtures	
This mixtu	are does not contain any substances to be	e mentioned according to the criteria of section 3.2 of HazCom 2012
SECTIC	ON 4: First-aid measures	
4.1.	Description of first aid measures	
		Remove person to fresh air and keep comfortable for breathing.
		Wash skin with plenty of water.
	-	Rinse eyes with water as a precaution.
First-aid n	neasures after ingestion :	Call a poison center/doctor/physician if you feel unwell.
4.2.	Most important symptoms and effects	(acute and delayed)
4.3.	Immediate medical attention and spec	ial treatment, if necessary
	ptomatically.	,
•	N 5: Fire-fighting measures	

	sh o. i ne-ngnang measures	
5.1.	Suitable (and unsuitable) extinguish	ing media
Suitable e	extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.

Safety Data Sheet

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

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	zards arising from the c		forman many bar salar and			
lazardous decomposi ire	tion products in case of	: I OXIC	fumes may be released.			
	tective equipment and p					
Protection during firefig	ghting		ot attempt to take action v ratus. Complete protectiv		protective equip	nent. Self-contained breathing
	dental release mea					
6.1. Personal pr	ecautions, protective e	quipment	and emergency proced	ures		
	ergency personnel					
Emergency procedures	S	: Venti	late spillage area.			
6.1.2. For emerge	ncy responders					
Protective equipment			ot attempt to take action v to section 8: "Exposure c			nent. For further information
6.2. Environmer	ntal precautions					
Avoid release to the er	nvironment.					
6.3. Methods an	d material for containm	ent and c	leaning up			
Methods for cleaning u	ıp		up liquid spill into absorb			
Other information		: Dispo	ose of materials or solid re	esidues at an au	uthorized site.	
6.4. Reference t	o other sections					
For further information	refer to section 13.					
SECTION 7: Han	dling and storage					
7.1. Precautions	s for safe handling			the last of the		
Precautions for safe ha	andling		re good ventilation of the			
Hygiene measures		: Do no produ		en using this pr	oduct. Always wa	ash hands after handling the
B.1. Control para D-3-Hydroxybutyric No additional information No additional information No additional information B.2. Appropriate engineerin Appropriate engineerin Environmental exposu B.3. Individual p	Acid Assay Kit (Bottle ation available e engineering controls ag controls	sonal pr 5) : Ensu : Avoid	re good ventilation of the I release to the environme	work station.		
Hand protection:						
Protective gloves	N# - 4! - !			- , · · ·		Denstanting
Туре	Material	<u> </u>	Permeation	Thickn	Thickness (mm) Penetration	
Disposable gloves	Nitrile rubber (NB	K)	3 (> 60 minutes)			2 (< 1.5)
Eye protection:						
Safety glasses						
Туре		Use Characteristics				
Safety glasses		Droplet clear, With side shields		e shields		
Skin and body prote	ection:	1			1	
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Safety Data Sheet

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

Wear suitable protective clothing
Туре
Lab coat

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition
Dust mask	Туре Р1	Protection for Liquid particles

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical p	properties
9.1. Information on basic physical and c	hemical properties
Physical state	: Liquid
Color	: Colorless
Odor	: None
Odor threshold	: No data available
рН	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
9.2 Other information	

9.2. Other information

No additional information available

SECTION	DN 10: Stability and reactivity
10.1.	Reactivity
The prod	uct is non-reactive under normal conditions of use, storage and transport.
10.2.	Chemical stability
Stable ur	ider normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Safety Data Sheet

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

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological inf	formation
11.1. Information on toxicological	effects
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2.	Persistence and degradability
No addi	itional information available
12.3.	Bioaccumulative potential
No addi	itional information available
12.4.	Mobility in soil
No addi	itional information available
12.5.	Other adverse effects
No addi	itional information available

SECTION 13: Disposal considerations 13.1. Disposal methods Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Safety Data Sheet

Transport by sea

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

Not applicable
Air transport
Not applicable
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 National regulations No additional information available
15.3. US State regulations
No additional information available
SECTION 16: Other information

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

Revision date

: 03/14/2022

SDS US (GHS HazCom 2012)

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.



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 12/15/2017 Revision date: 03/14/2022 Supersedes: 12/15/2017 Version: 1.0

NCSazyme	Issue date: 12/15/2017	Revision date: 03/14/2022	Supersedes: 12/15/201	17 Version: 1.0
SECTION 1: Identification				
1.1. Identification				
Product form	: Mixture			
Product name	: D-3-Hydroxyt	outyric Acid Assay Kit (Bottle 4)	ļ	
Product code	: K-HDBA (Bot	tle 4)		
1.2. Recommended use and I	restrictions on use			
Use of the substance/mixture	: Use as labora	atory reagent		
1.3. Supplier				
Manufacturer Megazyme Bray Business Park Bray, A98 YV29 - Ireland T +353 12861220 - F +353 1286126 cs@megazyme.com - www.megazym				
1.4. Emergency telephone nu	Imber			
Emergency number	: +353 128612	20 [9 am to 5 pm GMT - Monda	ay to Friday]	
SECTION 2: Hazard(s) ident	tification			
2.1. Classification of the subs	stance or mixture			
GHS US classification				
Respiratory sensitization, Category 1	May ca	ause an allergy or asthma symp	otoms or breathing diffice	ulties if inhaled
2.2. GHS Label elements, inc GHS US labeling Hazard pictograms (GHS US)	luding precautionary staten	ア甫花		
Signal word (GHS US)	: Danger			
Hazard statements (GHS US)	•	n allergy or asthma symptoms o	or breathing difficulties if	inhaled
Precautionary statements (GHS US)	Avoid breathi [In case of ina If inhaled: If b breathing. If experiencin	ng mist, spray, vapors. adequate ventilation] wear resp oreathing is difficult, remove per ng respiratory symptoms: Call a ontents/container to	iratory protection. son to fresh air and kee	p comfortable for
2.3. Other hazards which do	not result in classification			
No additional information available				
2.4. Unknown acute toxicity (GHS US)			
Not applicable				
SECTION 3: Composition/Ir	formation on ingredie	ents		
3.1. Substances				
Not applicable				
3.2. Mixtures				
Name	Common Na (Synonyms)		er %	GHS US classification
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Safety Data Sheet

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

Full text of hazard classes and H-statements : s	see section 16		
SECTION 4: First-aid measures			
4.1. Description of first aid measures			
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.		
First-aid measures after skin contact	: Wash skin with plenty of water.		
First-aid measures after eye contact	: Rinse eyes with water as a precaution.		
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.		
4.2. Most important symptoms and effe	ects (acute and delayed)		
4.3. Immediate medical attention and s	necial treatment if necessary		
Treat symptomatically.	pecial treatment, in necessary		
SECTION 5: Fire-fighting measures			
5.1. Suitable (and unsuitable) extinguis			
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.		
5.2. Specific hazards arising from the c	hemical		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.		
5.3. Special protective equipment and	precautions for fire-fighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing		
rotootion dannig monghang	apparatus. Complete protective clothing.		
SECTION 6: Assidental release may			
SECTION 6: Accidental release measures			
6.1. Personal precautions, protective e	quipment and emergency procedures		
6.1.1. For non-emergency personnel			
Emergency procedures	: Ventilate spillage area.		
6.1.2. For emergency responders			
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information		
	refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			
Avoid release to the environment.			
6.3. Methods and material for containm	pent and cleaning up		
Methods for cleaning up	: Take up liquid spill into absorbent material.		
Other information	: Dispose of materials or solid residues at an authorized site.		
6.4. Reference to other sections For further information refer to section 13.			
SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.		
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.		
7.2. Conditions for safe storage, includ	ling any incompatibilities		
Storage conditions	: Store in a well-ventilated place. Keep cool.		
SECTION 8: Exposure controls/pers	sonal protection		
8.1. Control parameters			
D-3-Hydroxybutyric Acid Assay Kit (Bottle	4)		
No additional information available			

Safety Data Sheet

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

No additional information available	/

8.2. Appropriate engineering controls

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

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Туре	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)

Eye protection:

Safety glasses

Туре	Use	Characteristics
Safety glasses	Droplet	clear, With side shields

Skin and body protection:

Wear suitable protective clothing

Туре					
Lab coat					
Respiratory protection:					
In case of insufficient ventilation, wear suitable respiratory equipment					
Device	Filter type	Condition			
Dust mask	Туре Р1	Protection for Liquid particles			

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties Information on basic physical and chemical properties 9.1. Physical state : Liquid Color : Colorless Odor : None Odor threshold : No data available pН : No data available Melting point : Not applicable Freezing point : No data available : No data available Boiling point : No data available Flash point Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not applicable. Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : No data available : Soluble in water. Solubility 05/21/2022 EN (English US)

Safety Data Sheet

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

Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity	у		
10.1. Reactivity			
The product is non-reactive under normal cond	itions of use, storage and transport.		
10.2. Chemical stability			
Stable under normal conditions.			
10.3. Possibility of hazardous reactions			
No dangerous reactions known under normal c	onditions of use.		
10.4. Conditions to avoid			
None under recommended storage and handlin	ng conditions (see section 7).		
10.5. Incompatible materials			
No additional information available			
10.6. Hazardous decomposition product			
Under normal conditions of storage and use, ha	azardous decomposition products should not be produced.		
SECTION 11: Toxicological informa	ition		
11.1. Information on toxicological effect	S		
Acute toxicity (oral)	: Not classified		
Acute toxicity (dermal)	: Not classified		
Acute toxicity (inhalation)	: Not classified		
Skin corrosion/irritation	: Not classified		
Serious eye damage/irritation	: Not classified		
Respiratory or skin sensitization	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
Reproductive toxicity	: Not classified		
STOT-single exposure	: Not classified		
STOT-repeated exposure	: Not classified		
Aspiration hazard	: Not classified		
Viscosity, kinematic	: No data available		

SECTI	ON 12: Ecological information	
12.1.	Toxicity	
Ecology	- general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
12.2.	Persistence and degradability	
No addit	ional information available	

Safety Data Sheet

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

12.3.	Bioaccumulative potential	
No add	itional information available	
12.4.	Mobility in soil	
No add	itional information available	
40.5		
12.5.	Other adverse effects	
SECT	ION 13: Disposal considerat	tions
13.1.	Disposal methods	
Waste	treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECT	ION 14: Transport information	on
	ment of Transportation (DOT)	

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

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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 National regulations No additional information available
15.3. US State regulations
No additional information available
SECTION 16: Other information

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NIC3.L.J.	Issue date: 12/15/2017	Revision date: 03/14/2022	Supersedes: 12/15/2017	Version: 1.0
SECTION 1: Identification				
1.1. Identification				
Product form	: Mixture			
Product name	: D-3-Hydroxy	butyric Acid Assay Kit (Bottle 3)	
Product code	: K-HDBA (Bo	ottle 3)		
1.2. Recommended use and	d restrictions on use			
Use of the substance/mixture	: Use as labor	ratory reagent		
1.3. Supplier				
Manufacturer Megazyme Bray Business Park Bray, A98 YV29 - Ireland T +353 12861220 - F +353 128612 cs@megazyme.com - www.megaz				
1.4. Emergency telephone	number			
Emergency number	: +353 12861;	220 [9 am to 5 pm GMT - Mond	ay to Friday]	
SECTION 2: Hazard(s) ide	ntification			
2.1. Classification of the su				
GHS US classification				
Not classified				
2.2. GHS Label elements, ir	cluding precautionary state	monto		
GHS US labeling	icidulity precautionaly state			
No labeling applicable		一日心		
2.3. Other hazards which d	o not result in classification			
No additional information available				
2.4. Unknown acute toxicity	(GHS US)			
Not applicable				
SECTION 3: Composition/	Information on ingredi	ents		
3.1. Substances				
Not applicable				
3.2. Mixtures				
This mixture does not contain any	substances to be mentioned a	ccording to the criteria of sectio	n 3.2 of HazCom 2012	
SECTION 4: First-aid mea				
4.1. Description of first aid				
First-aid measures after inhalation		son to fresh air and keep comfo	ortable for breathing.	
First-aid measures after skin conta		ith plenty of water.		
First-aid measures after eye contain	•	with water as a precaution.	faal upwall	
First-aid measures after ingestion		n center/doctor/physician if you		
4.2. Most important sympto	oms and effects (acute and d	elayed)		
4.3. Immediate medical atte	ention and special treatment,	, if necessary		
Treat symptomatically.				
SECTION 5: Fire-fighting	neasures			

	sh si i ne-nghang measures	
5.1.	Suitable (and unsuitable) extinguish	ing media
Suitable extinguishing media		: Water spray. Dry powder. Foam. Carbon dioxide.

Safety Data Sheet

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

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5.2. Specific ha	zards arising from the cl	nemical				
-	ition products in case of		fumes may be released.			
fire						
	ptective equipment and p		-			
Protection during firefi	ighting		ot attempt to take action withou ratus. Complete protective cloth		protective equipme	ent. Self-contained breathing
	idental release mea					
6.1. Personal p	recautions, protective eq	luipment	and emergency procedures			
	nergency personnel					
Emergency procedure	es	: Ventil	ate spillage area.			
6.1.2. For emerge	ency responders					
Protective equipment			ot attempt to take action withou to section 8: "Exposure control			ent. For further information
6.2. Environme	ntal precautions					
Avoid release to the e	nvironment.					
6.3. Methods ar	nd material for containme	ent and cl	leaning up			
Methods for cleaning	up		up liquid spill into absorbent m			
Other information		: Dispo	se of materials or solid residue	es at an au	thorized site.	
	to other sections					
For further information	n refer to section 13.					
SECTION 7: Han	dling and storage					
7.1. Precaution	s for safe handling					
Precautions for safe h	andling		re good ventilation of the work			
Hygiene measures		: Do no produ	ot eat, dri <mark>nk or smoke when</mark> usi ct	ng this pro	oduct. Always wash	n hands after handling the
3.1. Control par	c Acid Assay Kit (Bottle 3	onal pr	in a well-ventilated place. Kee			
	e engineering controls	_				
Appropriate engineeri Environmental exposu	•		re good ventilation of the work release to the environment.	station.		
8.3. Individual J	protection measures/Per	sonal pro	tective equipment			
Hand protection:						
Protective gloves						
Туре	Material		Permeation	Thickne	ess (mm)	Penetration
Disposable gloves	Nitrile rubber (NB	R)	3 (> 60 minutes)			2 (< 1.5)
Eye protection:	· · · · ·	-		1		
Safety glasses						
		llas			Characteristics	
Туре		Use		Characteristics		
Safety glasses		Droplet			clear, With side s	shields
Skin and body prot	tection:					
05/21/2022		EN (End	alish US)			14/2

Safety Data Sheet

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

Wear suitable protective clothing			
Туре			
Lab coat			

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition
Dust mask	Туре Р1	Protection for Liquid particles

Personal protective equipment symbol(s):



9.1. Information on basic physical and chemical properties Physical state : Liquid Color : Colorless Odor : None Odor threshold : No data available pH : No data available Melting point : Not data available Freezing point : No data available Boiling point : No data available Flash point : No data available Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not data available Relative vapor density at 20 °C : No data available Relative density : No data available Relative density : No data available
Color:ColorlessOdor:NoneOdor threshold:No data availablepH:No data availableMelting point:Not applicableFreezing point:No data availableBoiling point:No data availableFlash point:No data availableRelative evaporation rate (butyl acetate=1):No data availableFlammability (solid, gas):No tapplicable.Vapor pressure:No data availableRelative vapor density at 20 °C:No data availableRelative density:No data available
Odor:NoneOdor threshold:No data availablepH:No data availableMelting point:Not applicableFreezing point:No data availableBoiling point:No data availableFlash point:No data availableFlash point:No data availableRelative evaporation rate (butyl acetate=1):No data availableFlammability (solid, gas):Not applicable.Vapor pressure:No data availableRelative vapor density at 20 °C:No data availableRelative density:No data available
Odor threshold:No data availablepH:No data availableMelting point:Not applicableFreezing point:No data availableBoiling point:No data availableFlash point:No data availableFlash point:No data availableRelative evaporation rate (butyl acetate=1):No data availableFlammability (solid, gas):Not applicable.Vapor pressure:No data availableRelative vapor density at 20 °C:No data availableRelative density:No data available
pH:No data availableMelting point:No data availableFreezing point:No data availableBoiling point:No data availableFlash point:No data availableFlash point:No data availableRelative evaporation rate (butyl acetate=1):No data availableFlammability (solid, gas):Not applicable.Vapor pressure:No data availableRelative vapor density at 20 °C:No data availableRelative density:No data available
Melting point:Not applicableFreezing point:Not applicableBoiling point:No data availableBoiling point:No data availableFlash point:No data availableRelative evaporation rate (butyl acetate=1):No data availableFlammability (solid, gas):Not applicable.Vapor pressure:No data availableRelative vapor density at 20 °C:No data availableRelative density:No data available
Freezing point : No data available Boiling point : No data available Flash point : No data available Flash point : No data available Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not applicable. Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : No data available
Boiling point: No data availableFlash point: No data availableFlash point: No data availableRelative evaporation rate (butyl acetate=1): No data availableFlammability (solid, gas): Not applicable.Vapor pressure: No data availableRelative vapor density at 20 °C: No data availableRelative density: No data available
Flash point:No data availableRelative evaporation rate (butyl acetate=1):No data availableFlammability (solid, gas):Not applicable.Vapor pressure:No data availableRelative vapor density at 20 °C:No data availableRelative density:No data available
Relative evaporation rate (butyl acetate=1):No data availableFlammability (solid, gas):Not applicable.Vapor pressure:No data availableRelative vapor density at 20 °C:No data availableRelative density:No data available
Flammability (solid, gas): Not applicable.Vapor pressure: No data availableRelative vapor density at 20 °C: No data availableRelative density: No data available
Vapor pressure: No data availableRelative vapor density at 20 °C: No data availableRelative density: No data available
Relative vapor density at 20 °C : No data available Relative density : No data available
Relative density : No data available
Solubility Soluble in water
Partition coefficient n-octanol/water (Log Pow) : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTIC	DN 10: Stability and reactivity
10.1.	Reactivity
The produ	uct is non-reactive under normal conditions of use, storage and transport.
10.2.	Chemical stability
Stable un	der normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Safety Data Sheet

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

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological info	ormation
11.1. Information on toxicological	effects
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2.	Persistence and degradability				
No addi	No additional information available				
12.3.	Bioaccumulative potential				
No addi	itional information available				
12.4.	Mobility in soil				
No additional information available					
12.5.	Other adverse effects				
No additional information available					

SECTION 13: Disposal considerations 13.1. Disposal methods Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Safety Data Sheet

Transport by sea

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

Not applicable
Air transport
Not applicable
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 National regulations No additional information available
15.3. US State regulations
No additional information available
SECTION 16: Other information

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

Revision date

: 03/14/2022

SDS US (GHS HazCom 2012)

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Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 12/15/2017 Revision date: 03/14/2022 Supersedes: 12/15/2017 Version: 1.0

SECTION 1: Identification						
1.1. Identification						
Product form	: Mixture					
Product name	: D-3-Hydroxybutyric Aci	d Assay Kit (Bottle 2)				
Product code : K-HDBA (Bottle 2)						
1.2. Recommended use and restrictions	on use					
Use of the substance/mixture	: Use as laboratory reage	ent				
1.3. Supplier						
Manufacturer Megazyme Bray Business Park Bray, A98 YV29 - Ireland T +353 12861220 - F +353 12861264 <u>cs@megazyme.com</u> - <u>www.megazyme.com</u>						
1.4. Emergency telephone number						
Emergency number	: +353 12861220 [9 am t	o 5 pm GMT - Monday t	o Friday]			
SECTION 2: Hazard(s) identification						
2.1. Classification of the substance or m	ixture					
GHS US classification						
Not classified						
2.2. GHS Label elements, including preca	autionary statements	الملجا واوار				
GHS US labeling		コロネリ				
No labeling applicable		FFIT				
2.2 Other becards which do not result in	alaction					
2.3. Other hazards which do not result in No additional information available	classification					
2.4. Unknown acute toxicity (GHS US) Not applicable						
SECTION 3: Composition/Information	n on ingredients					
3.1. Substances						
Not applicable						
3.2. Mixtures						
Name	Common Name (Synonyms)	Product identifier	%	GHS US classification		
2-(4-iodophenyl)-3-(4-nitrophenyl)-5-phenyltetrazolium chloride, INT		(CAS-No.) 146-68-9	1 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332		
Full text of hazard classes and H-statements : se	e section 16					
SECTION 4: First-aid measures						
4.1. Description of first aid measures						
First-aid measures after inhalation	: Remove person to fresl	h air and keep comfortat	le for breathing.			
First sid massures after skin sentest						

First-aid measures after skin contact : Wash skin with plenty of water.

- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.
- 4.2. Most important symptoms and effects (acute and delayed)

Safety Data Sheet

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

4.3. Immediate medical attention and spec	sial tractment if necessary
4.3. Immediate medical attention and spec Treat symptomatically.	idi treatment, ii necessary
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishing	ng media
Suitable extinguishing media	Water spray. Dry powder. Foam.
5.2. Specific hazards arising from the che	mical
Hazardous decomposition products in case of fire	Toxic fumes may be released.
5.3. Special protective equipment and pre	cautions for fire-fighters
Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release measure	Ires
6.1. Personal precautions, protective equi	pment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	Ventilate spillage area.
6.1.2. For emergency responders	
U U U	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containmen	t and cleaning up
Methods for cleaning up	Mechanically recover the product.
Other information	Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, including	any incompatibilities
Storage conditions	Store in a well-ventilated place. Keep cool.
SECTION 8: Exposure controls/perso	
8.1. Control parameters	
D-3-Hydroxybutyric Acid Assay Kit (Bottle 2)	
No additional information available	
2-(4-iodophenyl)-3-(4-nitrophenyl)-5-phenyltet	razolium chloride, INT (146-68-9)
No additional information available	
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/Perso	nal protective equipment
Hand protection:	
Protective gloves	

Safety Data Sheet

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

Туре	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	2 (> 30 minutes)		2 (< 1.5)

Eye protection:

Safety glasses

Туре	Use	Characteristics
Safety glasses	Dust	clear, With side shields

Skin and body protection:

Wear suitable protective clothing

Туре	
Lab coat	

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition
Dust mask	Type P1	Protection for Liquid particles

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical	properti <mark>es and the transmission of the</mark>
9.1. Information on basic physical and c	chemical properties
Physical state	: Solid
Color	: Colorless
Odor	: None
Odor threshold	: No data available
рН	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available
9.2. Other information	

No additional information available

Safety Data Sheet

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

according to Federal Register / Vol. 77, No. 58 / Monda	according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations					
SECTION 10: Stability and reactivity						
10.1. Reactivity						
The product is non-reactive under normal cond	The product is non-reactive under normal conditions of use, storage and transport.					
10.2. Chemical stability						
Stable under normal conditions.						
10.3. Possibility of hazardous reactions						
No dangerous reactions known under normal c	onditions of use.					
10.4. Conditions to avoid						
None under recommended storage and handlir	ig conditions (see section 7).					
10.5. Incompatible materials						
No additional information available						
10.6. Hazardous decomposition product						
Under normal conditions of storage and use, ha	azardous decomposition products should not be produced.					
SECTION 11: Toxicological informa	tion					
11.1. Information on toxicological effect	S					
Acute toxicity (oral)	: Not classified					
Acute toxicity (dermal)	: Not classified					
Acute toxicity (inhalation)	: Not classified					
Skin corrosion/irritation	: Not classified					
Serious eye damage/irritation	: Not classified					
Respiratory or skin sensitization	: Not classified					
Germ cell mutagenicity	Not classified					
Carcinogenicity	: Not classified					
Reproductive toxicity	: Not classified					
STOT-single exposure	: Not classified					
STOT-repeated exposure	: Not classified					
Aspiration hazard	: Not classified					
Viscosity, kinematic	: No data available					
SECTION 12: Ecological informatio	n					
12.1. Toxicity Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse					
	effects in the environment.					
12.2. Persistence and degradability						
No additional information available						
12.3. Bioaccumulative potential						
No additional information available						
12.4. Mobility in soil						
No additional information available						

12.5. Other adverse effects

No additional information available

Safety Data Sheet

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

SECTION 13: Disposal consideratio	ns
13.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTION 14: Transport information	
Department of Transportation (DOT) In accordance with DOT	
Not applicable	
Transportation of Dangerous Goods	
Not applicable	
Transport by sea	
Not applicable	
Air transport	
Not applicable	
SECTION 15: Regulatory informatio	n
15.1. US Federal regulations	
No additional information available	
15.2. International regulations	
CANADA No additional information available EU-Regulations No additional information available National regulations No additional information available	EP莆粒
15.3. US State regulations	
No additional information available	
SECTION 16: Other information	
according to Federal Register / Vol. 77, No. 58 / Monda	ay, March 26, 2012 / Rules and Regulations
Revision date	: 03/14/2022

SDS US (GHS HazCom 2012)

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.



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 12/15/2017 Revision date: 03/14/2022 Supersedes: 12/15/2017 Version: 1.0

N C3429 me	Issue date: 12/15/2017	Revision date: 03/14/2022	Supersedes: 12/15/2017	Version: 1.0
SECTION 1: Identification				
1.1. Identification				
Product form	: Mixture			
Product name	: D-3-Hydroxyt	outyric Acid Assay Kit (Bottle 1)	
Product code	: K-HDBA (Bot		,	
1.2. Recommended use and	restrictions on use	,		
Use of the substance/mixture	: Use as labora	atory reagent		
1.3. Supplier				
Manufacturer Megazyme Bray Business Park Bray, A98 YV29 - Ireland T +353 12861220 - F +353 1286126 cs@megazyme.com - www.megazy				
1.4. Emergency telephone nu	Imber			
Emergency number	: +353 128612	20 [9 am to 5 pm GMT - Mond	ay to Friday]	
SECTION 2: Hazard(s) iden	tification			
2.1. Classification of the sub	stance or mixture			
GHS US classification				
Serious eye damage/eye irritation Ca Hazardous to the aquatic environme Category 3 Hazardous to the aquatic environme Category 3	nt - Acute Hazard Harmfu nt - Chronic Hazard Harmfu	s serious eye irritation ul to aquatic life ul to aquatic life with long lastir	ng effects	
2.2. GHS Label elements, inc	luding precautionary staten	nents		
GHS US labeling				
Hazard pictograms (GHS US)				
Signal word (GHS US)	: Warning			
Hazard statements (GHS US)	Harmful to aq	us eye irritation µatic life µatic life with long lasting effe	cts	
Precautionary statements (GHS US)	: Wash hands Avoid release Wear eye pro IF IN EYES: I and easy to d If eye irritation	thoroughly after handling. to the environment. tection, protective clothing, pro Rinse cautiously with water for lo. Continue rinsing. n persists: Get medical advice, ontents/container to	otective gloves several minutes. Remove cor	itact lenses, if present
2.3. Other hazards which do	not result in classification			
No additional information available				
2.4. Unknown acute toxicity	(GHS US)			
Not applicable				
SECTION 3: Composition/In	nformation on ingredie	ents		
3.1. Substances				

Not applicable

3.2. Mixtures

Safety Data Sheet

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

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
triethanolamine	2,2',2"-nitrilotriethanol / 2,2',2"-nitrilo-tris(ethanol) / 2,2',2"- trihydroxytriethylamine / daltogen / ethanol, 2,2',2"- nitrilotri- / ethanol, 2,2',2"- nitrilotri- / ethanol, 2,2',2"- triethanol / sterolamide / sting-kill / TEA (=triethanolamine) / thiofaco T-35 / tri(2- hydroxyethyl)amine / triethylolamine / triethylolamine / trihydroxytriethylamine / tris(2-hydroxyethyl)amine / tris(hydroxyethyl)amine / tris(hydroxyethyl)amine / trolamine	(CAS-No.) 102-71-6	5 – 10	Not classified
TRITON X-100	polyethylene glycol p- (1,1,3,3-tetramethylbutyl)- phenyl ether, / octyl phenol ethoxylate, / polyoxyethylene octyl phenyl ether, / 4- octylphenol polyethoxylate, / Mono 30, / TX-100, / t- octylphenoxypolyethoxyet hanol, / Octoxynol-9	(CAS-No.) 9002-93-1	1 – 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

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

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.
4.2. Most important symptoms and effects	s (acute and delayed)
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
4.3. Immediate medical attention and spe	cial treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishing	ng media
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Specific hazards arising from the che	mical
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Special protective equipment and pre	cautions for fire-fighters
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release meas	ures
6.1. Personal precautions, protective equ	ipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

Safety Data Sheet

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

6.1.2. For emergency responders						
Protective equipment		: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".				
				s/personal	protection .	
6.2. Environmental pr						
Avoid release to the environr	ment.					
	erial for containmer					
For containment			t spillage.			
Methods for cleaning up			ip liquid spill into absorbent ma			
Other information		: Dispos	se of materials or solid residue	s at an au	thorized site.	
6.4. Reference to othe						
For further information refer t	to section 13.					
SECTION 7: Handling	and storage					
7.1. Precautions for s	afe handling					
Precautions for safe handling	9		e good ventilation of the work s ime/gas/mist/vapors/spray. We			
Hygiene measures			minated work clothing should r			
			g before reuse. Do not eat, dri	nk or smo	ke when using this p	roduct. Always wash hands
			andling the product.			
	fe storage, including					
Storage conditions		: Store i	n a well-ventilated place. Keep	o cool.		
SECTION 8: Exposure	o controls/porso	nal pro	staction			
8.1. Control paramete			Nection			
o.i. Control paramete	13					
D-3-Hydroxybutyric Acid	Accov Kit (Pottle 1)					
No additional information a	• • •	_				
				-		
triethanolamine (102-71-6) USA - ACGIH - Occupational Exposure Limits						
Local name			riethanolamine			
ACGIH TWA (mg/m ³) 5 mg/m ³ (Triethanolamine; USA; Time-weighted average exposure limit 8 h; TLV -						
			dopted Value)			
Remark (ACGIH)		E	iye & skin irr			
TRITON X-100 (9002-93-1))					
No additional information a	vailable					
8.2. Appropriate engin	neering controls					
Appropriate engineering cont	trols	: Ensure	e good ventilation of the work s	station.		
Environmental exposure con	trols	: Avoid	release to the environment.			
8.3. Individual protect	tion measures/Perso	onal prot	ective equipment			
Hand protection:						
Protective gloves						
Туре	Type Material Permeation Thickness (mm) Penetration				Penetration	
Disposable gloves	Nitrile rubber (NBR))	3 (> 60 minutes)			2 (< 1.5)
Eye protection:						
Safety glasses						
Туре		Use			Characteristics	
Safety glasses		Droplet			clear, With side shi	elds
Skin and body protection	:					

Wear suitable protective clothing

Safety Data Sheet

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

Туре		
Lab coat		

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition
Dust mask	Type P1	Protection for Liquid particles

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical	properties
9.1. Information on basic physical and o	chemical properties
Physical state	: Liquid
Color	: Mixture contains one or more component(s) which have the following colour(s): Colourless to light yellow On exposure to air: brown
Odor	: None
Odor threshold	: No data available
рН	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No d <mark>ata available</mark>
Flash point	: No d <mark>ata available</mark>
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

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.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Safety Data Sheet

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

10.4. Conditions to avoid	
None under recommended storage and hand	dling conditions (see section 7).
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition produ	ucts
	hazardous decomposition products should not be produced.
SECTION 11: Toxicological inform	
11.1. Information on toxicological effe	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
triethanolamine (102-71-6)	> 5000 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 6400 mg/kg
	bodyweight; Rat)
LD50 dermal rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit)
TRITON X-100 (9002-93-1)	
LD50 oral rat	1800 mg/kg rat
LD50 dermal rabbit	> 3000 mg/kg rabbit
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity Carcinogenicity	: Not classified
triethanolamine (102-71-6)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1.	TOXICILY
Ecology -	general

: Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

triethanolamine (102-71-6)	
LC50 fish 1	11800 mg/l
EC50 other aquatic organisms 1	2038 mg/l waterflea
LC50 fish 2	450 – 1000 mg/l (LC50; 96 h; Lepomis macrochirus)
EC50 other aquatic organisms 2	216 mg/l
TRITON X-100 (9002-93-1)	
EC50 Daphnia 1	26 mg/l (EC50; 48 h)
LC50 fish 2	8.9 mg/l (LC50; 96 h)
12.2. Persistence and degradability	
triethanolamine (102-71-6)	

Persistence and degradability	Photolysis in the air. Readily biodegradable in water.	
05/21/2022	EN (English US)	27/29

Safety Data Sheet

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

triethanolamine (102-71-6)	
Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance
Chemical oxygen demand (COD)	1.5 g O ₂ /g substance
ThOD	2.04 g O ₂ /g substance
BOD (% of ThOD)	0.02 % ThOD
TRITON X-100 (9002-93-1)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.16 g O ₂ /g substance

12.3. Bioaccumulative potential

triethanolamine (102-71-6)	
BCF fish 1	< 3.9 (Cyprinus carpio; TEST DURATION: 6 WEEKS)
Partition coefficient n-octanol/water (Log Pow)	-2.531.32
Bioaccumulative potential	Bioaccumulation unlikely.
TRITON X-100 (9002-93-1)	
Partition coefficient n-octanol/water (Log Pow)	4.86 (estimated value)
12.4. Mobility in soil	

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal consideration	ons
13.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
CECTION 44. Transmost information	

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information
15.1. US Federal regulations
triethanolamine (102-71-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
15.2. International regulations
CANADA No additional information available
EU-Regulations
No additional information available National regulations
No additional information available
15.3. US State regulations

Safety Data Sheet

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

Component	State or local regulations
triethanolamine(102-71-6)	U.S New Jersey - Right to Know Hazardous Substance List
SECTION 16: Other information	

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

Revision date

: 03/14/2022

SDS US (GHS HazCom 2012)

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.

