

Vers 0.0	ion	Revision Date: 02/06/2024	SD F0	0S Number: 00003065	Date of last issue: 05/23/2016 Date of first issue: 05/23/2016			
SEC	TION 1	. IDENTIFICATION						
	Product name :			EXCELSIOR FR	920			
	Manufacturer or supplier's de Company name of supplier Address Telephone		deta : :	ils RHC 1602 N Union Street Fostoria, OH 44830-1158 (866) 353-9261 (CHEMTREC): (800) 424-9300 (CHEMTREC International):				
	-			(703) 527-3887 I 1300 Danny Wel	ndustrial Health/Spill Emergency: (706) 277- ch (ehs@trcc.com)			
SEC	TION 2. GHS cl	. HAZARDS IDENTIF	ICAT rdano	ION ce with the OSHA	Hazard Communication Standard (29 CFR			
	Flamma	200) able liquids	:	Category 4				
	Acute toxicity (Inhalation)		:	Category 3				
	Acute toxicity (Dermal)		:	Category 3				
	Skin co	prrosion	:	Category 1				
	Serious	s eye damage	:	Category 1				
	GHS label elements Hazard pictograms		:					
	Signal Word		:	Danger				
	Hazard	Statements	:	H227 Combustib H311 + H331 To H314 Causes se	le liquid. xic in contact with skin or if inhaled. vere skin burns and eye damage.			
	Precautionary Statements		:	P102 Keep out o P103 Read label Prevention:	f reach of children. before use.			

P210 Keep away from heat/ sparks/ open flames/ hot surfaces.
No smoking.
P261 Avoid breathing mist or vapors.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:



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		P301 + P330 + P3 induce vomiting. P303 + P361 + P3 all contaminated of P304 + P340 + P3 and keep comforta CENTER/ doctor. P305 + P351 + P3 water for several n and easy to do. C CENTER/ doctor. P362 Take off cor P370 + P378 In ca hol-resistant foam	 331 IF SWALLOWED: Rinse mouth. Do NOT 353 IF ON SKIN (or hair): Take off immediately clothing. Rinse skin with water/ shower. 310 IF INHALED: Remove person to fresh air able for breathing. Immediately call a POISON 338 + P310 IF IN EYES: Rinse cautiously with minutes. Remove contact lenses, if present ontinue rinsing. Immediately call a POISON ataminated clothing and wash before reuse. ase of fire: Use dry sand, dry chemical or alcoto extinguish.
		Storage: P403 + P233 Store in a well-ventilated place. Keep containe tightly closed. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.	
		Disposal:	

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity:

P501 Dispose of contents/ container to an approved waste dis-

72.5 % The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 72.5 %

posal plant.

Other hazards

Additional Labeling

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical name	CAS-No.	Concentration (% w/w)
2-butoxyethanol	111-76-2	>= 20 - < 30
2-aminoethanol	141-43-5	>= 5 - < 10

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice :	Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attend- ance. Do not leave the victim unattended.
If inhaled :	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

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In case of eye contact In case of eye contact		 Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficul- ty. If on skin, rinse well with water. If on clothes, remove clothes 					
		 Small amounts splashed into eyes can cause irreversible sue damage and blindness. In the case of contact with eyes, rinse immediately with of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. 					
		Clean mouth v Keep respirate Do NOT induc Do not give mi Never give any If symptoms p Take victim im	vith water and drink afterwards plenty of water. ory tract clear. e vomiting. Ik or alcoholic beverages. ything by mouth to an unconscious person. ersist, call a physician. mediately to hospital.				
Most in and eff delayed	nportant symptoms ects, both acute and d	: May be harmfu Toxic in conta Causes seriou Causes severe Toxic in conta Causes seriou Causes seriou	ul if swallowed. ct with skin or if inhaled. is eye damage. e burns. ct with skin or if inhaled. is eye damage. e burns.				
Notes t	o physician	: Treat sympton	natically.				

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Unsuitable extinguishing media	:	Carbon dioxide (CO2) High volume water jet
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion prod- ucts	:	No hazardous combustion products are known
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored sepa- rately in closed containments. Use a water spray to cool fully closed containers.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec-	:	Use personal protective equipment.
tive equipment and emer-		



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gency	procedures		
Environmental precautions		: Prevent product fr Prevent further lea If the product cont respective author	om entering drains. akage or spillage if safe to do so. taminates rivers and lakes or drains inform ities.
Metho contai	ods and materials for inment and cleaning up	: Neutralize with ac Contain spillage, a sorbent material, miculite) and plac / national regulation Keep in suitable, o	id. and then collect with non-combustible ab- (e.g. sand, earth, diatomaceous earth, ver- e in container for disposal according to local ons (see section 13). closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against : fire and explosion	Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of ignition.
Advice on safe handling :	Avoid formation of aerosol. Do not breathe vapors/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the ap- plication area. Provide sufficient air exchange and/or exhaust in work rooms. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations
Conditions for safe storage :	No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid :	Do not freeze. Keep away from oxidizing agents and strongly acid or alkaline materials. Keep away from tobacco products.
	Keep away from food and drink.
Further information on stor- : age stability	No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type	Control parame-	Basis



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				(Form of	ters / Permissible			
2 but	toxyethanol		111 76 2	exposure)	20 ppm			
2-bui	loxyethanoi		111-70-2		Z0 ppm			
				IVVA	24 mg/m3	NIOSH KEL		
				TWA	50 ppm 240 mg/m3	OSHA Z-1		
				TWA	25 ppm 120 mg/m3	OSHA P0		
2-am	inoethanol		141-43-5	TWA	3 ppm	ACGIH		
				STEL	6 ppm	ACGIH		
				TWA	3 ppm 8 mg/m3	NIOSH REL		
				ST	6 ppm 15 mg/m3	NIOSH REL		
				TWA	3 ppm 6 mg/m3	OSHA Z-1		
				TWA	3 ppm 8 mg/m3	OSHA P0		
				STEL	6 ppm 15 mg/m3	OSHA P0		
			appropriate exhaust). Maintain air concentrations below occupational exposure standards.					
Pers	onal protective equipr	nent						
Resp	biratory protection	:	No personal	respiratory prot	ective equipment norn	nally re-		
Hand	d protection		quirou.					
R	emarks	:	The suitability with the proc	ty for a specific	workplace should be d	liscussed		
Eye	Eye protection :		Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.					
Skin	and body protection	:	Impervious clothing Choose body protection according to the amount and con-					
Prote	ective measures	 Avoid contact with skin. The type of protective equipment must be selecte to the concentration and amount of the dangerous at the specific workplace. Personal protective equipment comprising: suitab gloves, safety goggles and protective clothing When using do not eat, drink or smoke. 			d according s substance le protective			
Hygi	Hygiene measures :		Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.					

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES



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	Appear	ance	:	liquid	
	Color		:	clear	
	Odor		:	characteristic	
	pН		:	11.5 - 12.5	
	Melting	point/range	:	No data available	
	Boiling	point/boiling range	:	212 °F / 100 °C	
	Flash p	oint	:	163 °F / 73 °C	
	Upper e flamma	explosion limit / Upper bility limit	:	No data available	
	Lower e flamma	explosion limit / Lower bility limit	:	No data available	
	Vapor p	pressure	:	No data available	
	Density	,	:	955 - 965 kg/m3	
	Solubili Wat	ty(ies) er solubility	:	completely solubl	e
	Solu	ubility in other solvents	:	not determined	
	Partitio octanol	n coefficient: n- /water	:	No data available	

SECTION 10. STABILITY AND REACTIVITY

Reactivity Chemical stability Possibility of hazardous reac- tions	:	No decomposition if stored and applied as directed. No decomposition if stored and applied as directed. No decomposition if stored and applied as directed. Vapors may form explosive mixture with air.
Conditions to avoid Incompatible materials Hazardous decomposition products	:	Heat, flames and sparks. Not applicable Carbon dioxide (CO2), carbon monoxide (CO), oxides of ni- trogen (NOx), dense black smoke.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Toxic in contact with skin or if inhaled.

Product:

Acute oral toxicity	:	Acute toxicity estimate: 2,226 mg/kg Method: Calculation method

Acute toxicity estimate: 2,226 mg/kg

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			Method: Calculation	on method
Acı	ute inhalation toxicity	:	Acute toxicity estir Exposure time: 4 Test atmosphere: Method: Calculatio	nate: 4.13 mg/l h vapor on method
			Acute toxicity estir Exposure time: 4 Test atmosphere: Method: Calculatio	nate: 4.13 mg/l n vapor on method
Acı	ute dermal toxicity	:	Acute toxicity estir Method: Calculation	nate: 412.5 mg/kg on method
			Acute toxicity estir Method: Calculation	nate: 397 mg/kg on method
Co	mponents:			
2-b Асі	utoxyethanol: ute oral toxicity	:	LD50 (Mouse): 1,8	519 mg/kg
			LD50 (Rat): 2,300 GLP: no	mg/kg
Acı	ute inhalation toxicity	:	LC50 (Rat): 900 p Exposure time: 4 Test atmosphere: GLP: no	pm h vapor
			LC50 (Rat): 450 p Exposure time: 4 l	om 1
2-a	minoethanol:			
Acı	ute oral toxicity	:	LD50 (Rat): 10.2 g)/kg
			LD50 (Rat): 2,050	mg/kg
Acı	ute inhalation toxicity	:	LC50 (Rat): > 1.3 Exposure time: 6 Test atmosphere: GLP: yes	mg/l h vapor
Acı	ute dermal toxicity	:	LD50 (Rabbit): 1,0)25 mg/kg
			LD50 (Rabbit): 2,8 GLP: yes	81 mg/kg
Ski	n corrosion/irritation			

Causes severe burns.

Result GLP



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	<u>Produ</u>	ict:			
	Remarks		:	Extremely corr	osive and destructive to tissue.
	<u>Comp</u>	onents:			
	2-buto	oxyethanol:			
	Specie	es	:	Rabbit	
	Asses	sment	:	irritating	
	GLP	iu	:	no	
	2-ami	noethanol:			
	Asses	sment	:	irritating	
	Serio	us eye damage/eye i	irritati	on	
	Cause	es serious eye damag	je.		
	Produ	<u>ict:</u>			
	Rema	rks	:	May cause irre	versible eye damage.
	<u>Comp</u>	onents:			
	2-buto	oxyethanol:			
	Specie	es	:	Rabbit	
	Expos	sure time	:	24 - 72 h	
	Metho	d	:	in vivo	
	GLP	-	:	yes	
	2-ami	noethanol:			
	Specie	es	:	Rabbit	
	Expos	sure time	:	24 - 72 h	
	Asses	sment	:	irritating	
	Metho	d		in vivo	
	GLP		:	no	
	Respi	ratory or skin sensi	tizatio	n	
	Skin s Not cla	sensitization assified based on ava	ailable	information.	
	Respi	ratory sensitization			
	Not cla	assified based on ava	ailable	information.	
	<u>Comp</u>	onents:			
	2-buto	oxyethanol:			
	Test T	уре	:	Skin sensitizati	ion:
	Specie	es	:	Guinea pig	
		iu	•		

: Non sensitising

: yes



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2-amin	oethanol:						
Test Ty Specie Methoo Result GLP	/pe s i	 Skin sensitization Guinea pig in vivo Non sensitising No data available 	:				
Germ o Not cla	cell mutagenicity ssified based on avail	able information.					
Carcin	ogenicity						
Not cla IARC	ssified based on avail No ingredien identified as	d based on available information. No ingredient of this product present at levels greater than or equal to 0.19 identified as probable, possible or confirmed human carcinogen by IARC.					
OSHA	No compone on OSHA's li	No component of this product present at levels greater than or equal to 0.1% i on OSHA's list of regulated carcinogens.					
NTP	No ingredien identified as	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.					

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

2-butoxyethanol:

Species NOAEL Application Route Exposure time Method	:	Guinea pig, male < 375 ppm(m) Inhalation 30 d vapor
GLP	•	no
Species NOAEL Application Route Exposure time Method GLP		Rabbit, male and female > 150 mg/kg Dermal 90 d Occlusive yes
Species NOAEL Application Route Exposure time	:	Mouse, male > 694 mg/kg Oral 90 d



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Meth GLP	od	:	Oral yes	
2-am	ninoethanol:			
Spec	zies	:	Rat, male	
NOA	EL	:	500 mg/m3	
Appli	ication Route	:	Inhalation	
Meth	lod	:	Vapor/aerosol	
GLP		:	no	
Spec	cies	:	Rat, male and fer	nale
NOA	EL	:	300 mg/kg	
Appli	ication Route	:	Oral	
Expo Moth	osure time		> / 5 0 Diet	
GLP		:	Ves	
			,	
Aspi	ration toxicity			
Not c	classified based on ava	ailable	information.	
Furth	her information			
Prod	luct:			
Rem	arks		No data available	
Ecot	oxicity	NFORIN	IATION	
<u>Com</u>	ponents:			
2-but	toxyethanol:			
Toxic	city to fish	:	LC50 (Cyprinodo mg/l Exposure time: 90	n variegatus (sheepshead minnow)): > 116 6 h
			LC50 (Lepomis m Exposure time: 9 Method: static tes	nacrochirus (Bluegill sunfish)): 1,490 mg/l 6 h t
			LC50 (Carp (Leud Exposure time: 4	ciscus idus melanotus)): 1,575 mg/l 8 h
			LC50 (Pimephale Exposure time: 9 Analytical monito Method: static tes GLP: no	s promelas (fathead minnow)): 2,137 mg/l 6 h ring: Analytical monitoring: no st
			LC50 (Leuciscus Exposure time: 4	idus (Golden orfe)): 1,575 mg/l 8 h
			Analytical monito Method: static tes	ring: Analytical monitoring: no data st



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				GLP: no	
	Toxicity aquatic	/ to daphnia and other invertebrates	:	LC50 (Penaeus s Exposure time: 96	o.): > 130 mg/l ∂ h
				LC50 (Crangon cr Exposure time: 48 Method: Renewal	angon (shrimp)): 600 - 1,000 mg/l 3 h
				LC50 (Crangon cr Exposure time: 96 Method: Renewal	angon (shrimp)): 550 - 950 mg/l Sh
				LC50 (Daphnia m Exposure time: 48 Analytical monitor Method: static tes GLP: no	agna (Water flea)): > 1,000 mg/l } h ing: Analytical monitoring: no data t
				LC50 (Crangon cr Exposure time: 96	angon (shrimp)): 775 mg/l Sh
	Toxicity icity)	/ to fish (Chronic tox-	:	NOAEL (No obser fish)): > 100 mg/l Exposure time: 21 Analytical monitor Method: semi-stat	rved adverse effect level) (Danio rerio (zebra d ing: Analytical monitoring: no iic test
	Toxicity aquatic ic toxic	y to daphnia and other invertebrates (Chron- ity)	:	EC50 (Daphnia m Exposure time: 21 Analytical monitor Method: semi-stat GLP: no	agna (Water flea)): 297 mg/l l d ing: Analytical monitoring: yes iic test
				EC50 (Ceriodaphi Exposure time: 7 Analytical monitor Method: semi-stat GLP: no	nia dubia (water flea)): 138 mg/l d ing: Analytical monitoring: no tic test
				NOAEL (No obser (Water flea)): 100 Exposure time: 21 Analytical monitor Method: semi-stat GLP: no	rved adverse effect level) (Daphnia magna mg/l d ing: Analytical monitoring: yes tic test
	2-amin Toxicity	oethanol: / to fish	:	LC50 (Lepomis m Exposure time: 96	acrochirus (Bluegill sunfish)): 300 mg/l 5 h
				LC50 (Oncorhync Exposure time: 96	hus mykiss (rainbow trout)): 150 mg/l S h



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				LC50 (Oncorhync Exposure time: 24	hus mykiss (rainbow trout)): > 200 mg/l 1 h
				LC50 (Pimephales Exposure time: 96 Method: Acute tox	s promelas (fathead minnow)): 2,070 mg/l 5 h cicity
				LC50 (Lepomis m Exposure time: 48 Method: static tes	acrochirus (Bluegill sunfish)): 365.9 mg/l 3 h t
				LC50 (Lepomis m mg/l Exposure time: 96 Method: static tes	acrochirus (Bluegill sunfish)): 300 - 1,000 5 h t
				LC50 (Pimephales Exposure time: 96 Analytical monitor Method: flow-thro GLP: no	s promelas (fathead minnow)): 2,070 mg/l 5 h ing: Analytical monitoring: yes ugh test
				LC50 (Leuciscus i Exposure time: 48 Analytical monitor Method: static tes GLP: no	idus (Golden orfe)): 224 - 525 mg/l 3 h ing: Analytical monitoring: no data t
	Toxicity aquatic	/ to daphnia and other invertebrates	:	LC50 (Crangon cr Exposure time: 48 Method: Renewal	rangon (shrimp)): > 100 mg/l 3 h
	Toxicity icity)	/ to fish (Chronic tox-	:	LOAEL (Lowest o pes (Japanese m Exposure time: 41 Analytical monitor Method: flow-thro	bserved adverse effect level) (Oryzias lati- edaka)): 3.55 mg/l l d ing: Analytical monitoring: no data
				NOAEL (No obser alis (Brook trout)): Exposure time: 60 Analytical monitor Method: flow-thro	rved adverse effect level) (Salvelinus fontin- : 14.1 mg/l) d ing: Analytical monitoring: no ugh test
	Toxicity aquatic ic toxici	/ to daphnia and other invertebrates (Chron- ity)	:	EC50 (Daphnia m Exposure time: 21 Analytical monitor Method: semi-stat GLP: No data ava	agna (Water flea)): 15.75 mg/l l d ing: Analytical monitoring: yes tic test ilable
				NOAEL (No obser (Water flea)): 0.85 Exposure time: 21 Analytical monitor Method: semi-stat	rved adverse effect level) (Daphnia magna 5 mg/l d ing: Analytical monitoring: yes tic test



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			GLP: No data available			
Pers	istence and degrada	bility				
<u>Com</u>	ponents:					
2-but	toxyethanol:					
Biode	egradability	: Biodegradation GLP: No data a	n: 82 % available			
		Biodegradation GLP: No data a	n: 64 % available			
		Biodegradatio GLP: No data a	n: 26 % available			
		Biodegradatio GLP: No data a	n: 70 % available			
		Concentration Biodegradation GLP: no	: 20 mg/l n: 20 %			
		Biodegradation GLP: No data a	n: 88 % available			
		Biodegradation GLP: No data a	n: 74 % available			
		Concentration Biodegradation GLP: no	: 20 mg/l n: 63 %			
		Concentration Biodegradation GLP: no	: 3 mg/l n: 67 - 75 %			
		Concentration Biodegradation GLP: no	: 3 mg/l n: 12 %			
		Biodegradatio GLP: No data a	n: 29 % available			
		Biodegradation GLP: No data a	n: 75 % available			
		Concentration Biodegradation GLP: no	: 20 mg/l n: 40 %			
		Biodegradation GLP: no	n: 90.4 %			
		Biodegradation	n: 82 %			



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		GLP: No data	available
		Concentration Biodegradation GLP: no	: 3 mg/l 1: 73 - 77 %
		Concentration Biodegradation Exposure time GLP: no	: 400 mg/l n: 95 % : 8 d
		Biodegradation GLP: No data a	n: 47 % available
		Biodegradatior GLP: no	n: 58.7 %
		Biodegradatior GLP: no	n: 40.5 %
		Biodegradatior GLP: no	n: 43 %
		Concentration Biodegradation GLP: no	20 mg/l 1: 67 %
		Biodegradation GLP: No data a	n: 75 % available
		Biodegradation GLP: No data a	n: 26 % available
		Biodegradation GLP: No data a	n: 74 % available
		Biodegradation GLP: No data a	n: 88 % available
		Biodegradatior GLP: no	n: 18.3 %
		Biodegradation GLP: No data a	n: 70 % available
		Concentration Biodegradation GLP: no	: 20 mg/l n: 74 - 75 %
2-am	inoethanol:		
Biode	egradability	Concentration: Biodegradation Exposure time GLP: no	: 20 mg/l n: > 90 % : 21 d



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			Concentration: 19 Biodegradation: > Exposure time: 37 GLP: no Concentration: 76 Biodegradation: > Exposure time: 28 GLP: no Concentration: 10 Biodegradation: 8 Exposure time: 14 GLP: no	mg/l > 80 % l d 5 mg/l > 70 % 3 d 0 mg/l 33 % 4 d
			Concentration: 10 Biodegradation: > Exposure time: 28 GLP: no	00 mg/l > 70 % 3 d
E	Bioaccumulative potential			
<u>c</u>	Components:			
2 F c	e-butoxyethanol: Partition coefficient: n- octanol/water	:	log Pow: 0.83 log Pow: 0.83	
2	aminoothanol			
E	Bioaccumulation	:	Bioconcentration	factor (BCF): 2.3
			Species: various Bioconcentration	factor (BCF): 0.75
			Bioconcentration	factor (BCF): 9.2
F	Partition coefficient: n-	:	log Pow: -1.31	
C			log Pow: -1.31	
N	lobility in soil Io data available			
c	Other adverse effects			
<u>F</u>	Product:			
C	Dzone-Depletion Potential	:	Regulation: 40 CF tection of Stratosy Substances Remarks: This pro- tured with a Class Clean Air Act Sec	R Protection of Environment; Part 82 Pro- oheric Ozone - CAA Section 602 Class I oduct neither contains, nor was manufac- s I or Class II ODS as defined by the U.S. tion 602 (40 CFR 82, Subpt. A, App.A + B)

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Addit matic	tional ecological infor- on	: An environme unprofessiona Harmful to aqu	ntal hazard cannot be excluded in the event of I handling or disposal. atic life with long lasting effects.				
SECTION 13. DISPOSAL CONSIDERATIONS							
Disp	osal methods						
Wast	e from residues	: The product sl courses or the Do not contarr cal or used co Send to a licer	nould not be allowed to enter drains, water soil. ninate ponds, waterways or ditches with chemi- ntainer. nsed waste management company.				
Conta	aminated packaging	: Empty remain Dispose of as	ing contents.				

Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG UN number Proper shipping name Class Packing group Labels	:	UN 1760 CORROSIVE LIQUID, N.O.S. 8 II 8
IATA-DGR UN/ID No. Proper shipping name Class Packing group Labels Packing instruction (cargo aircraft)		UN 1760 Corrosive liquid, n.o.s. (ETHANOLAMINE) 8 II Corrosives 855
IMDG-Code UN number Proper shipping name Class Packing group Labels EmS Code Marine pollutant	:	UN 1760 CORROSIVE LIQUID, N.O.S. 8 II 8 F-A, S-B no

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

Not applicable for product as supplied.

Domestic regulation

49 CFR UN/ID/NA number

N/ID/NA number	:	UN 1760	



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Prope	er shipping name	:	Corrosive liquids, (ETHANOLAMIN	n.o.s. E)
Class		:	8	
Packing group		:	II	
Labels		:	CORROSIVE	
ERG Code		:	154	
Marine pollutant		:	no	

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

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

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

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

SARA 311/312 Hazards	:	Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

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

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

SECTION 16. OTHER INFORMATION

Further information





ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA P0	:	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA P0 / TWA OSHA P0 / STEL OSHA Z-1 / TWA	: : :	8-hour time weighted average Short-term exposure limit 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System: IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International



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Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date

02/06/2024

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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