SAFETY DATA SHEET

RS REVIEW DATE: 01/06/23

This safety data sheet was created pursuant to the requirements of: Safety data sheet according to Regulation (EC) 2020/878

Revision date 08/04/2023 Revision Number 1.3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name RS Pro Safewash Super

Product Code(s) 217-3841, 241-2449, ZP

Safety data sheet number 00818

Unique Formula Identifier (UFI) J9H2-G04D-G009-P3R1

Pure substance/mixture Mixture

Contains Tetrahydrofurfuryl alcohol, Alcohol C9-11, ethoxylated, 2-Aminoethanol, Diethanolamine, Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts, Sodium Metasilicate Pentahydrate, Tetrasodium ethylene diamine tetraacetate, Sodium hydroxide

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Cleaning agent

Uses advised against No specific uses advised against are identified

1.3. Details of the supplier of the safety data sheet

Supplier

RS Components Ltd Birchington Road Corby Northants NN17 9RS +44 (0) 845 850 9900 RCustomerServicesUK@rs-components.com

RS Components Ltd Glenview Industrial Estate Herberton Road Rialto Dublin 12 +353 (0) 1 415 3100 enquiries.ie@rs-components.com

For further information, please contact

E-mail address RCustomerServicesUK@rs-components.com

1.4. Emergency telephone number

Emergency Telephone

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Emergency Telephone -

+44 (0) 1865 407333 (24hr), +44 1235 239670 (24hr), +353 (0)1 809 2166 (08:00 - 22:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 1 - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Reproductive toxicity	Category 1B - (H360Df)

2.2. Label elements

Contains Tetrahydrofurfuryl alcohol, Alcohol C9-11, ethoxylated, 2-Aminoethanol, Diethanolamine, Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts, Sodium Metasilicate Pentahydrate, Tetrasodium ethylene diamine tetraacetate, Sodium hydroxide



Signal word

Danger

Hazard statements

H314 - Causes severe skin burns and eye damage

H360 - May damage fertility or the unborn child

H360Df - May damage the unborn child. Suspected of damaging fertility

Precautionary Statements - EU (§28, 1272/2008)

P202 - Do not handle until all safety precautions have been read and understood

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Tetrahydrofurfuryl alcohol 97-99-4	10-30	01-2119968921-26-00 00	202-625-6	Repr. 1B (H360Df) Eye Irrit. 2 (H319)	-	-	-
Alcohol C9-11, ethoxylated 68439-46-3	5-10	No data available	614-482-0	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	-	-	-
2,2',2"-Nitrilotriethan ol 102-71-6	1-5	01-2119486482-31-00 00	203-049-8	-	1	-	-
2-Aminoethanol 141-43-5	1-5	01-2119486455-28-00 00	205-483-3	Skin Corr. 1B (H314) Acute Tox. 4 (H332) Acute Tox. 4 (H302) Acute Tox. 4 (H312) STOT SE 3 (H335) Eye Dam. 1 (H318)	STOT SE 3 :: C>=5%	-	-
Diethanolamine 111-42-2	0.1-1	No data available	203-868-0	STOT RE 2 (H373) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	-	-	-
Sodium hydroxide 1310-73-2	<0.1	No data available	215-185-5	Skin Corr. 1A (H314) Eye Dam. 1 (H318)	Eye Irrit. 2 :: 0.5%<=C<2% Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Skin Irrit. 2 :: 0.5%<=C<2%	-	-
Trisodium nitrilotriacetate 5064-31-3	<0.1	01-2119519239-36-00 00	225-768-6	Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Carc. 2 (H351)	Carc. 2 :: C>=5%	-	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
		mg/kg	hour - dust/mist - mg/L	hour - vapour - mg/L	hour - gas - ppm
Tetrahydrofurfuryl alcohol 97-99-4	1600	No data available	No data available	No data available	No data available
Alcohol C9-11, ethoxylated 68439-46-3	1400	No data available	No data available	No data available	No data available
2,2',2"-Nitrilotriethanol	4190	20000	No data available	No data available	No data available

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
102-71-6					
2-Aminoethanol 141-43-5	1720	1000	1.95	No data available	No data available
Diethanolamine 111-42-2	780	13034.07	No data available	No data available	No data available
Sodium hydroxide 1310-73-2	325	1350	No data available	No data available	No data available
Trisodium nitrilotriacetate 5064-31-3	1100	No data available	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Get immediate medical attention.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes. Get immediate medical attention.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. Get immediate medical attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Wear personal protective clothing (see section 8).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible

perforation of stomach or esophagus should be investigated. Do not give chemical

antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may

occur with moist rales, frothy sputum, and high pulse pressure.

SECTION 5: Firefighting measures

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5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing mediaDo not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition

can lead to release of irritating gases and vapours.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning upTake up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before

reuse. Remove contaminated clothing and shoes.

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General hygiene considerations

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

Storage class (TRGS 510) LGK 6.1C.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
2,2',2"-Nitrilotriethanol	=	TWA: 0.8 ppm	TWA: 5 mg/m ³	-	-
102-71-6		TWA: 5 mg/m ³			
		STEL 1.6 ppm			
		STEL 10 mg/m ³			
		S+			
2-Aminoethanol	TWA: 1 ppm	TWA: 1 ppm	TWA: 1 ppm	STEL: 3 ppm	TWA: 1 ppm
141-43-5	TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³	STEL: 7.6 mg/m ³	TWA: 2.5 mg/m ³
	*	STEL 3 ppm	STEL: 3 ppm	TWA: 1 ppm	STEL: 3 ppm
		STEL 7.6 mg/m ³	STEL: 7.6 mg/m ³	TWA: 2.5 mg/m ³	STEL: 7.6 mg/m ³
		Sh+	D*	K*	*
Diethanolamine	-	TWA: 0.46 ppm	TWA: 0.2 ppm	TWA: 10 mg/m ³	TWA: 3 ppm
111-42-2		TWA: 2 mg/m ³	TWA: 1 mg/m ³		TWA: 15 mg/m ³
		STEL 0.92 ppm	D*		*
		STEL 4 mg/m ³			
		H*			
		Sh+			
Sodium hydroxide	-	TWA: 2 mg/m ³	-	TWA: 2.0 mg/m ³	STEL: 2 mg/m ³
1310-73-2		STEL 4 mg/m ³			
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
2,2',2"-Nitrilotriethanol	-	TWA: 5 mg/m ³	TWA: 0.5 ppm	S+	TWA: 5 mg/m ³
102-71-6		Ceiling: 10 mg/m ³	TWA: 3.1 mg/m ³	TWA: 5 mg/m ³	
		D*		STEL: 10 mg/m ³	
2-Aminoethanol	*	TWA: 2.5 mg/m ³	TWA: 1 ppm	TWA: 1 ppm	TWA: 1 ppm
141-43-5	STEL: 3 ppm	Ceiling: 7.5 mg/m ³	TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³
	STEL: 7.6 mg/m ³	D*	H*	STEL: 3 ppm	STEL: 3 ppm
	TWA: 1 ppm			STEL: 7.6 mg/m ³	STEL: 7.6 mg/m ³
	TWA: 2.5 mg/m ³			A*	iho*
Diethanolamine	-	TWA: 5 mg/m ³	TWA: 0.46 ppm	TWA: 3 ppm	TWA: 0.46 ppm
111-42-2		Ceiling: 10 mg/m ³	TWA: 2 mg/m ³	TWA: 5 mg/m ³	TWA: 2 mg/m ³
			H*	STEL: 6 ppm	iho*

			T	STEL: 30 mg/m ³	1
				A*	
Sodium hydroxide 1310-73-2	-	TWA: 1 mg/m ³ Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³	TWA: 1 mg/m ³ STEL: 2 mg/m ³	Ceiling: 2 mg/m ³
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
2,2',2"-Nitrilotriethanol 102-71-6	-	TWA: 1 mg/m ³	TWA: 1 mg/m ³ Peak: 1 mg/m ³	-	-
2-Aminoethanol 141-43-5	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ *	TWA: 0.2 ppm TWA: 0.5 mg/m³ Sh+ H* Skin sensitizer	TWA: 0.2 ppm TWA: 0.51 mg/m³ Peak: 0.2 ppm Peak: 0.51 mg/m³ skin sensitizer	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ *	TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ b*
Diethanolamine 111-42-2	TWA: 3 ppm TWA: 15 mg/m³	TWA: 0.11 ppm TWA: 0.5 mg/m³ Sh+ H*	TWA: 1 mg/m ³ Peak: 1 mg/m ³ * skin sensitizer	TWA: 3 ppm TWA: 15 mg/m³	-
Sodium hydroxide 1310-73-2	TWA: 2 mg/m ³	-	-	TWA: 2 mg/m ³ STEL: 2 mg/m ³	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Trisodium nitrilotriacetate 5064-31-3	-	TWA: 2 mg/m ³	TWA: 2 mg/m ³ Peak: 8 mg/m ³	-	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
2,2',2"-Nitrilotriethanol 102-71-6	TWA: 5 mg/m ³ STEL: 15 mg/m ³	-	TWA: 5 mg/m ³	-	STEL: 10 mg/m³ J+ TWA: 5 mg/m³
2-Aminoethanol 141-43-5	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ Sk*	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ cute*	TWA: 3 ppm TWA: 7.5 mg/m³ STEL: 6 ppm STEL: 15 mg/m³	TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ Ada*	STEL: 7.6 mg/m³ STEL: 3 ppm TWA: 2.5 mg/m³ TWA: 1 ppm O*
Diethanolamine 111-42-2	TWA: 0.2 ppm TWA: 1 mg/m³ STEL: 0.6 ppm STEL: 3 mg/m³ Sk*	-	TWA: 1 mg/m ³ cute*	-	STEL: 6 ppm STEL: 30 mg/m³ TWA: 3 ppm TWA: 15 mg/m³ O*
Sodium hydroxide 1310-73-2	STEL: 2 mg/m ³	-	Ceiling: 2 mg/m ³	TWA: 0.5 mg/m ³	Ceiling: 2 mg/m ³
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
2,2',2"-Nitrilotriethanol 102-71-6	-	-	-	TWA: 5 mg/m³ STEL: 10 mg/m³	-
2-Aminoethanol 141-43-5	STEL: 3 ppm STEL: 7.6 mg/m³ TWA: 1 ppm TWA: 2.5 mg/m³ Peau*	STEL: 3 ppm STEL: 7.6 mg/m³ skin* TWA: 1 ppm TWA: 2.5 mg/m³	TWA: 2.5 mg/m ³ STEL: 7.6 mg/m ³ H*	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 5 mg/m³ H*	STEL: 7.5 mg/m³ TWA: 2.5 mg/m³ skóra*
Diethanolamine 111-42-2	-	-	-	TWA: 3 ppm TWA: 15 mg/m³ STEL: 6 ppm STEL: 22.5 mg/m³	TWA: 9 mg/m³ skóra*
Sodium hydroxide 1310-73-2	-	-	-	Ceiling: 2 mg/m ³	STEL: 1 mg/m ³ TWA: 0.5 mg/m ³
Trisodium nitrilotriacetate 5064-31-3	-	-	-	-	TWA: 3.0 mg/m ³
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
2,2',2"-Nitrilotriethanol 102-71-6	TWA: 5 mg/m ³	-	-	-	TWA: 5 mg/m ³
2-Aminoethanol 141-43-5	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³	TWA: 1 ppm TWA: 2.5 mg/m³ K* Ceiling: 7.6 mg/m³	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.5 mg/m³

	(Cutânea*	P*			K*	vía dérmica*
Diethanolamine		'A: 1 mg/m ³	-	-	TWA: 0.5 mg/m ³		TWA: 0.2 ppm
111-42-2	(Cutânea*				0.11 ppm	TWA: 1 mg/m ³
						0.11 ppm	vía dérmica*
						0.5 mg/m³ K*	
Sodium hydroxide	Ceili	ing: 2 mg/m³	TWA: 1 mg/m ³	TWA: 2 mg/m ³		-	STEL: 2 mg/m ³
1310-73-2		3 3	STEL: 3 mg/m ³				9
Chemical name		Sı	weden	Switzerland		Uni	ted Kingdom
2,2',2"-Nitrilotriethand	ol		KGV: 10 mg/m ³	TWA: 5 mg/m ³			-
102-71-6			e KGV: 1.6 ppm	STEL: 5 mg/m ³			
			: 5 mg/m ³				
		NGV: 0.8 ppm H*					
2-Aminoethanol		Dindondo	••	S+		T\\\\\ 1 nnm	
2-Aminoethanoi 141-43-5		Bindande KGV: 3 ppm Bindande KGV: 7.5 mg/m ³		TWA: 2 ppm		TWA: 1 ppm TWA: 2.5 mg/m ³	
141-43-5		NGV: 1 ppm		TWA: 2 ppm TWA: 5 mg/m ³		STEL: 3 ppm	
		NGV: 2.5 mg/m ³		STEL: 4 ppm		STEL: 7.6 mg/m ³	
		H*		STEL: 10 mg/m ³		Sk*	
Diethanolamine		Vägledand	le KGV: 6 ppm	S+			-
111-42-2		Vägledande KGV: 30 mg/m ³		TWA: 1 mg/m ³			
			/: 3 ppm	STEL: 1 mg/m ²	3		
		NGV:	15 mg/m ³	H*			
0 " 1 1 1 1			H*	TIA/A 0 / 1			5 1 0 / 2
1			KGV: 2 mg/m ³	TWA: 2 mg/m ³		ST	EL: 2 mg/m ³
1310-73-2	-1-	NGV:	: 1 mg/m³	STEL: 2 mg/m ²			
Trisodium nitrilotriaceta	ate		-	TWA: 3 mg/m ³			-
5064-31-3				STEL: 11 mg/m	۱۳		

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Tetrahydrofurfuryl alcohol 97-99-4	-	1 mg/kg bw/day [4] [6]	1.4 mg/m³ [4] [6]
Alcohol C9-11, ethoxylated 68439-46-3	1	2080 mg/kg bw/day [4] [6]	294 mg/m³ [4] [6]
2,2',2"-Nitrilotriethanol 102-71-6	-	7.5 mg/kg bw/day [4] [6] 140 µg/cm2 [5] [6]	1 mg/m³ [5] [6]
2-Aminoethanol 141-43-5	-	3 mg/kg bw/day [4] [6]	1 mg/m³ [4] [6] 0.51 mg/m³ [5] [6]
Diethanolamine 111-42-2	-	0.13 mg/kg bw/day [4] [6]	0.75 mg/m³ [4] [6] 0.5 mg/m³ [5] [6]
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	-	119 mg/kg bw/day [4] [6]	7.6 mg/m³ [4] [6]
Sodium hydroxide 1310-73-2	-	-	1 mg/m³ [5] [6]

[4] [5] [6] Systemic health effects. Local health effects.

Long term.

Derived No Effect Level (DNEL) - General Public

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	⋲ v i	J)	vii	uate	UU.	$^{\prime}$,_	

Chemical name	Oral	Dermal	Inhalation
Tetrahydrofurfuryl alcohol 97-99-4	0.175 mg/kg bw/day [4] [6]	-	0.25 mg/m³ [4] [6]
Alcohol C9-11, ethoxylated 68439-46-3	25 mg/kg bw/day [4] [6]	-	87 mg/m³ [4] [6]
2,2',2"-Nitrilotriethanol 102-71-6	3.3 mg/kg bw/day [4] [6]	70 μg/cm2 [5] [6]	0.4 mg/m³ [5] [6]
2-Aminoethanol 141-43-5	1.5 mg/kg bw/day [4] [6]	-	0.18 mg/m³ [4] [6] 0.28 mg/m³ [5] [6]
Diethanolamine 111-42-2	0.06 mg/kg bw/day [4] [6]	-	0.125 mg/m³ [4] [6] 0.125 mg/m³ [5] [6]
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	0.425 mg/kg bw/day [4] [6]	-	1.3 mg/m³ [4] [6]
Sodium hydroxide 1310-73-2	-	-	1 mg/m³ [5] [6]

[4] Systemic health effects.[5] Local health effects.[6] Long term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Tetrahydrofurfuryl alcohol 97-99-4	1.9 mg/L	0.917 mg/L	0.19 mg/L	-	-
Alcohol C9-11, ethoxylated 68439-46-3	0.10379 mg/L	0.014 mg/L	0.10379 mg/L	-	-
2,2',2"-Nitrilotriethanol 102-71-6	0.32 mg/L	5.12 mg/L	0.032 mg/L	-	-
2-Aminoethanol 141-43-5	0.07 mg/L	0.028 mg/L	0.007 mg/L	-	-
Diethanolamine 111-42-2	0.021 mg/L	0.095 mg/L	0.002 mg/L	-	-
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	0.268 mg/L	0.0167 mg/L	0.0268 mg/L	-	-

Chemical name	Freshwater	Marine sediment	Sewage treatment	Soil	Food chain
	sediment				
Tetrahydrofurfuryl alcohol	8.6 mg/kg sediment	0.86 mg/kg	10 mg/L	0.6 mg/kg soil dw	-
97-99-4	dw	sediment dw			
Alcohol C9-11, ethoxylated	13.7 mg/kg	13.7 mg/kg	1.4 mg/L	1 mg/kg soil dw	-
68439-46-3	sediment dw	sediment dw	-		
2,2',2"-Nitrilotriethanol	1.7 mg/kg sediment	0.17 mg/kg	10 mg/L	0.151 mg/kg soil dw	-
102-71-6	dw	sediment dw			
2-Aminoethanol	0.357 mg/kg	0.0357 mg/kg	100 mg/L	1.29 mg/kg soil dw	-
141-43-5	sediment dw	sediment dw			
Diethanolamine	0.092 mg/kg	0.0092 mg/kg	100 mg/L	1.63 mg/kg soil dw	1.04 mg/kg food
111-42-2	sediment dw	sediment dw			

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
C10-13-alkyl derivs.,	8.1 mg/kg sediment dw	6.8 mg/kg sediment dw	3.43 mg/L	35 mg/kg soil dw	-
sodium salts 68411-30-3					

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do General hygiene considerations

> not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

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Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid Liquid **Appearance** Colour blue Odour Detergent.

Odour threshold No information available

Property Values Remarks • Method wantsds@macdermid.com Melting point / freezing point -5 °C Initial boiling point and boiling range98 °C wantsds@macdermid.com

Flammability No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available limits

Lower flammability or explosive No data available

limits

None known Flash point No data available No data available None known **Autoignition temperature** None known **Decomposition temperature**

117 pH (concentrated solution): 11.7

No data available pH (as aqueous solution) None known Kinematic viscosity No data available None known Dynamic viscosity 5-10 mPa s @ 20°C/68°F None known

Water solubility No data available None known

wantsds@macdermid.com

Solubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownVapour pressureNo data availableNone knownRelative densityNo data availableNone known

Bulk density 1.02 kg/l

Liquid Density No data available

Relative vapour density No data available None known

Particle characteristics

Particle Size No information available Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes

Not applicable

Explosive properties Not considered to be explosive

Oxidising properties Does not meet the criteria for classification as oxidising

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None. **Sensitivity to static discharge** None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Incompatible materials Acids. Bases. Oxidising agent.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Corrosive by inhalation.

(based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs.

Pulmonary edema can be fatal.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage.

(based on components). Corrosive to the eyes and may cause severe damage including

blindness. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. Corrosive. (based on

components). Causes burns.

Ingestion Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung

damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 7,491.70 mg/kg
ATEmix (dermal) 44,296.00 mg/kg
ATEmix (inhalation-gas) 193,627.70 ppm
ATEmix (inhalation-vapour) 473.30 mg/l
ATEmix (inhalation-dust/mist) 83.90 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Tetrahydrofurfuryl alcohol	= 1600 mg/kg (Rat)	-	-
Alcohol C9-11, ethoxylated	= 1400 mg/kg (Rat)	-	-
2,2',2"-Nitrilotriethanol	= 4190 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	-
2-Aminoethanol	= 1720 mg/kg (Rat)	= 1000 mg/kg (Rabbit)	> 1.3 mg/L (Rat)6 h
Diethanolamine	= 780 mg/kg (Rat)	= 11.9 mL/kg (Rabbit)	-
Sodium hydroxide	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
Trisodium nitrilotriacetate	= 1100 mg/kg (Rat)	-	> 5 mg/L (Rat)4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes severe skin burns and eye

damage.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye damage. Causes

burns.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met. Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union	
Trisodium nitrilotriacetate	Carc. 2	

Contains a known or suspected reproductive toxin. Classification based on data available Reproductive toxicity

for ingredients. May damage fertility or the unborn child.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union	
Tetrahydrofurfuryl alcohol	Repr. 1B	

STOT - single exposure Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met. STOT - repeated exposure

Based on available data, the classification criteria are not met. **Aspiration hazard**

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties The substance/mixture does not contain components considered to have endocrine

disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Tetrahydrofurfuryl alcohol	-	LC50: >101mg/L (96h,	-	-
		Oryzias latipes)		

2,2',2"-Nitrilotriethanol	EC50: =216mg/L (72h, Desmodesmus subspicatus) EC50: =169mg/L (96h, Desmodesmus subspicatus)	LC50: 10600 - 13000mg/L (96h, Pimephales promelas) LC50: >1000mg/L (96h, Pimephales promelas) LC50: 450 - 1000mg/L (96h, Lepomis macrochirus)	-	-
2-Aminoethanol	EC50: =15mg/L (72h, Desmodesmus subspicatus)	LC50: =227mg/L (96h, Pimephales promelas) LC50: =3684mg/L (96h, Brachydanio rerio) LC50: 300 - 1000mg/L (96h, Lepomis macrochirus) LC50: 114 - 196mg/L (96h, Oncorhynchus mykiss) LC50: >200mg/L (96h, Oncorhynchus mykiss)	-	EC50: =65mg/L (48h, Daphnia magna)
Diethanolamine	EC50: =7.8mg/L (72h, Desmodesmus subspicatus) EC50: 2.1 - 2.3mg/L (96h, Pseudokirchneriella subcapitata)	LC50: 4460 - 4980mg/L (96h, Pimephales promelas) LC50: 1200 - 1580mg/L (96h, Pimephales promelas) LC50: 600 - 1000mg/L (96h, Lepomis macrochirus)	-	EC50: =55mg/L (48h, Daphnia magna)
Sodium hydroxide	-	LC50: =45.4mg/L (96h, Oncorhynchus mykiss)	-	-
Trisodium nitrilotriacetate	-	C50: 93 - 170mg/L (96h, Pimephales promelas) LC50: 175 - 225mg/L (96h, Lepomis macrochirus) LC50: =252mg/L (96h, Lepomis macrochirus) LC50: =470mg/L (96h, Pimephales promelas) LC50: 560 - 1000mg/L (96h, Oryzias latipes) LC50: 72 - 133mg/L (96h, Oncorhynchus mykiss) LC50: 560 - 1000mg/L (96h, Poecilia reticulata) LC50: =114mg/L (96h, Pimephales promelas)	-	LC50: 560 - 1000mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

Component Information

Chemical name	Partition coefficient	
Tetrahydrofurfuryl alcohol	-0.14	

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2,2',2"-Nitrilotriethanol	-2.53
2-Aminoethanol	-2.3
Diethanolamine	-2.46

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB above the

threshold of declaration.

Chemical name	PBT and vPvB assessment	
Tetrahydrofurfuryl alcohol	The substance is not PBT / vPvB	
Alcohol C9-11, ethoxylated	The substance is not PBT / vPvB	
2,2',2"-Nitrilotriethanol	The substance is not PBT / vPvB	
2-Aminoethanol	The substance is not PBT / vPvB PBT assessment does	
	not apply	
Diethanolamine	The substance is not PBT / vPvB	
Sodium hydroxide	The substance is not PBT / vPvB PBT assessment does	
	not apply	
Trisodium nitrilotriacetate	The substance is not PBT / vPvB	

12.6. Endocrine disrupting properties

Endocrine disrupting properties The substance/mixture does not contain components considered to have endocrine

disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards

Not regulated
Not regulated
Not regulated
Not regulated
Not applicable

14.6 Special precautions for user

IMDG

14.1 UN number or ID number
Not regulated
Not regulated
Not regulated

14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not applicable

14.6 Special precautions for user

14.7 Maritime transport in bulk No information available according to IMO instruments

RID

14.1 UN number or ID number
 14.2 UN proper shipping name
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not regulated Not applicable

14.6 Special precautions for user

ADR

14.1UN number or ID numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special precautions for user

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	
2,2',2"-Nitrilotriethanol - 102-71-6	RG 49	
2-Aminoethanol - 141-43-5	RG 49,RG 49bis	
Diethanolamine - 111-42-2	RG 49,RG 49bis	

Germany

Water hazard class (WGK) obviously hazardous to water (WGK 2)

Netherlands

Chemical name	Netherlands - List of	Netherlands - List of	Netherlands - List of
	Carcinogens	Mutagens	Reproductive Toxins
Tetrahydrofurfuryl alcohol	-	-	Fertility Category 2 Development Category 1B

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorisation per
	Annex XVII	REACH Annex XIV

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Tetrahydrofurfuryl alcohol - 97-99-4	30. 75.	-
2-Aminoethanol - 141-43-5	75.	-
Diethanolamine - 111-42-2	75.	-
Sodium hydroxide - 1310-73-2	75.	-
Trisodium nitrilotriacetate - 5064-31-3	75.	-

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

TSCA Contact supplier for inventory compliance status DSL/NDSL Contact supplier for inventory compliance status **EINECS/ELINCS** Contact supplier for inventory compliance status Contact supplier for inventory compliance status **ENCS** Contact supplier for inventory compliance status **IECSC KECL** Contact supplier for inventory compliance status Contact supplier for inventory compliance status **PICCS** Contact supplier for inventory compliance status AIIC **NZIoC** Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals **NZIOC** - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H351 - Suspected of causing cancer

H360Df - May damage the unborn child. Suspected of damaging fertility

H373 - May cause damage to organs through prolonged or repeated exposure

Legend

Ceiling

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Maximum limit value * Skin designation

+ Sensitisers

Classification procedure				
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used			
Acute oral toxicity	Calculation method			
Acute dermal toxicity	Calculation method			
Acute inhalation toxicity - gas	Calculation method			
Acute inhalation toxicity - vapour	Calculation method			
Acute inhalation toxicity - dust/mist	Calculation method			
Skin corrosion/irritation	Calculation method			
Serious eye damage/eye irritation	Calculation method			
Respiratory sensitisation	Calculation method			
Skin sensitisation	Calculation method			
Mutagenicity	Calculation method			
Carcinogenicity	Calculation method			
STOT - single exposure	Calculation method			
STOT - repeated exposure	Calculation method			
Acute aquatic toxicity	Calculation method			
Chronic aquatic toxicity	Calculation method			
Aspiration hazard	Calculation method			
Ozone	Calculation method			

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AÉGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date 08/04/2023

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Disclaimer

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End of Safety Data Sheet