

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

1.1. Product identifier

Product form : Mixture
 Product name : Carclin Tank Isosolve
 UFI : F9P0-90EW-0003-R8D6

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

Relevant identified uses

Main use category : Professional use

1.3. Details of the supplier of the safety data sheet

Synerlogic Chemicals - Carclin
 Graafsingel 18-22
 6921 RT Duiven
 Nederland
 T +31 (0) 26 - 3186703
PNSHEQ@synerlogic.nl, www.carclin.com

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Corrosive to metals, Category 1 H290
 Acute toxicity (oral), Category 4 H302
 Skin corrosion/irritation, Category 1 H314
 Serious eye damage/eye irritation, Category 1 H318
 Reproductive toxicity, Category 1B H360
 Specific target organ toxicity – Single exposure, Category 3, H335
 Respiratory tract irritation

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Contains :

Potassium hydroxide; 2-Aminoethanol; Phenoxyethanol; 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether

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Hazard statements (CLP)	: H290 - May be corrosive to metals. H302 - Harmful if swallowed. H314 - Causes severe skin burns and eye damage. H335 - May cause respiratory irritation. H360 - May damage the unborn child. (if swallowed).
Precautionary statements (CLP)	: P201 - Obtain special instructions before use. P280 - Wear protective clothing, eye protection, face protection. P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a doctor. P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor. P308+P313 - IF exposed or concerned: Get medical advice/attention. P321 - Specific treatment (see supplemental first aid instruction on this label).

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether	CAS-No.: 111-77-3 EC-No.: 203-906-6 EC Index-No.: 603-107-00-6	20 – 50	Repr. 1B, H360D
Potassium hydroxide	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8 REACH-no: 01-2119487136-33	20 – 50	Acute Tox. 4 (Oral), H302 (ATE=333 mg/kg bodyweight) Skin Corr. 1A, H314 Eye Dam. 1, H318 Met. Corr. 1, H290
2-Aminoethanol	CAS-No.: 141-43-5 EC-No.: 205-483-3 REACH-no: 01-2119486455-28	10 – 20	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Corr. 1B, H314 STOT SE 3, H335 Aquatic Chronic 3, H412
Phenoxyethanol	CAS-No.: 122-99-6 EC-No.: 204-589-7 EC Index-No.: 603-098-00-9	5 – 10	Acute Tox. 4 (Oral), H302 (ATE=1394 mg/kg bodyweight) Eye Dam. 1, H318 STOT SE 3, H335

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Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Potassium hydroxide	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8 REACH-no: 01-2119487136-33	(0.5 ≤ C < 2) Eye Irrit. 2; H319 (0.5 ≤ C < 2) Skin Irrit. 2; H315 (2 ≤ C < 5) Skin Corr. 1B; H314 (5 ≤ C < 100) Skin Corr. 1A; H314

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell. Get medical advice/attention if you feel unwell. Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Wash skin with plenty of water. Take off contaminated clothing. Take off immediately all contaminated clothing. Call a physician immediately. If skin irritation occurs: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Call a poison center or a doctor if you feel unwell. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid breathing dust/fume/gas/mist/vapours/spray.
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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 containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

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

Additional hazards when processed : May be corrosive to metals.
Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapours, mist, spray. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures : Wash contaminated clothing before reuse. 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 locked up. Store in a well-ventilated place. Keep cool.
Packaging materials : Do not store in corrodable metal.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety glasses

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Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	>0.31mm		EN 388, EN ISO 374

Other skin protection

Materials for protective clothing

Condition	Material	Standard
Good resistance:	Synthetic material	EN 13034

Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Respiratory protection			
Device	Filter type	Condition	Standard
Reusable half mask	ABEK-P3	Vapour protection, Protection for Liquid particles	EN 140, EN 14387

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless. light yellow.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: > 12.2
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available

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Vapour pressure at 50°C	: Not available
Density	: 1.21 g/ml
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

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. May be corrosive to metals.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

May be corrosive to metals. metals. Consult supplier(s) of these materials for specific recommendations.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Carclin Tank Isosolve	
ATE CLP (oral)	926.689 mg/kg bodyweight
Potassium hydroxide (1310-58-3)	
LD50 oral	333 mg/kg bodyweight
2-Aminoethanol (141-43-5)	
LD50 oral rat	1089 mg/kg
LD50 dermal rabbit	2504 mg/kg
LC50 Inhalation - Rat	1.4 mg/l/4h
Skin corrosion/irritation	: Causes severe skin burns. pH: > 12.2
Phenoxyethanol (122-99-6)	
pH	7

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2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3)

pH	≈ 7
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Serious eye damage/irritation : Causes serious eye damage.
pH: > 12.2

Phenoxyethanol (122-99-6)

pH	7
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2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3)

pH	≈ 7
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Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : May damage the unborn child. (if swallowed).
STOT-single exposure : May cause respiratory irritation.

2-Aminoethanol (141-43-5)

STOT-single exposure	May cause respiratory irritation.
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Phenoxyethanol (122-99-6)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Potassium hydroxide (1310-58-3)

LC50 - Fish [1]	80 mg/l
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2-Aminoethanol (141-43-5)

LC50 - Fish [1]	349 mg/l (Cyprinus carpio)
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EC50 - Crustacea [1]	65 mg/l
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EC50 72h - Algae [1]	1 mg/l (Pseudokirchneriella subcapitata)
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12.2. Persistence and degradability

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Persistence and degradability	Rapidly degradable
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Potassium hydroxide (1310-58-3)

Persistence and degradability	Rapidly degradable
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2-Aminoethanol (141-43-5)

Persistence and degradability	Rapidly degradable
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Phenoxyethanol (122-99-6)

Persistence and degradability	Rapidly degradable
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2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3)

Persistence and degradability	Rapidly degradable
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12.3. Bioaccumulative potential

Potassium hydroxide (1310-58-3)

Partition coefficient n-octanol/water (Log Pow)	0.75
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR

ADR

14.1. UN number or ID number

UN 1719

14.2. UN proper shipping name

CAUSTIC ALKALI LIQUID, N.O.S. (Potassium hydroxide ; 2-Aminoethanol)

Transport document description

UN 1719 CAUSTIC ALKALI LIQUID, N.O.S. (Potassium hydroxide ; 2-Aminoethanol), 8, III, (E)

14.3. Transport hazard class(es)

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ADR	
14.4. Packing group	
	III
14.5. Environmental hazards	
	Dangerous for the environment: No
No supplementary information available	

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: C5
Special provisions (ADR)	: 274
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP1, TP28
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Hazard identification number (Kemler No.)	: 80
Orange plates	:



Tunnel restriction code (ADR)	: E
EAC code	: 2R

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

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Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H290	May be corrosive to metals.
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.

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Full text of H- and EUH-statements:

H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360	May damage the unborn child. (if swallowed).
H360D	May damage the unborn child.
H412	Harmful to aquatic life with long lasting effects.

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.