

according to Regulation (EC) No 1907/2006, Article 31, as modified by Regulation (EU) No 2020/879 Edition 3

Printing date: 13/04/2022

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

1.1. Product identifier

Mixture identification:

Trade name: SWISSJET SP5 Yellow

Trade code:

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

Recommended use: Digital printing ink Uses advised against:

All those who are not listed in the recommended uses

1.3. Details of the supplier of the safety data sheet

Company: Swiss Performance Chemicals

Rothaustrasse 61 4132 Muttenz Switzerland

Competent person responsible for the safety data sheet:

1.4. Emergency telephone number

Tel. +41 (0) 618261031

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Warning, Skin Sens. 1B, May cause an allergic skin reaction.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H317 May cause an allergic skin reaction.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace

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

P302+P352 IF ON SKIN: Wash with plenty of water and soap.



P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of waste product or used containers according to local regulations

Special Provisions:

None

Contains

Disperse Yellow 54, 3-hydroxy-2-(3-hydroxy-2-quinolyl)-1H-inden-1-one Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Components		CLP Classification	Product identifier
C.I. Disperse Yellow 54	3% <= x < 5%	3.4.2/1B Skin Sens. 1B H317	CAS: 17772-51- 9 EC: 241-753-7 REACH 01- No.: 21200863 53-55- 00066
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	< 0.1%	Acute Tox. 4 H302, Skin Irrit. 2 H315, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Acute 1 H400 [SensSk1: C ≥ 0,05 %]	CAS-No.: 2634-33-5 EC-No.: 220-120-9 Index-No: 613-088- 00-6

Note: Upper limit is not included into the range. The full wording of hazard (H) phrases is given in section 16 of the sheet.



SECTION 4: First aid measures

4.1. Description of first aid measures

Contact with skin:

Wash with plenty of water and soap.

Contact with eyes:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Swallowing:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended extinguishers:

Water, CO2, Foam, Chemical powders, according to the materials involved in the fire.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up



Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

Adopt good working practices, so that the product is not released into the environment.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

ΝÀ

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Safety glasses for protection against chemicals (EN166).

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Wear suitable gloves tested to EN374.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties



9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance:	liquid		
Colour:	yellow		
Odour:	mild		
Odour threshold:	not available		
pH:	8.5 – 9.5		@ 25 °C
Melting point / freezing point:	not available		
Initial boiling point and boiling range:	> 100°C / 212 °F		
Flash point:	> 130 °C / 266 °F		
Evaporation rate:	not available		
Solid/gas flammability:	not applicable		Not applicable, it's a liquid
Upper/lower flammability or explosive limits:	not available		
Vapour pressure:	not available		
Vapour density:	not available		
Relative density:	1.090		@ 25 °C
Solubility in water:	soluble		
Solubility in oil:	not available		
Partition coefficient (n-octanol/water):	not available		
Auto-ignition temperature:	not available		
Decomposition temperature:	not available		
Viscosity:	4-6 cPs		@ 25 °C
Explosive properties:	not applicable	Regulation (EC) No 1907/2006, Annex VII, Column 2, point 7.11	
Oxidizing properties:	not applicable	Regulation (EC) No 1907/2006, Annex VII, Column 2, point 7.13	the product is incapable of reacting exothermically with combustible materials

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	miscible	-	
Fat Solubility:	not available		
Conductivity:	<3000 µS/cm		@ 25°C



SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

a) acute toxicity

No data is available on the product itself.

b) skin corrosion/irritation

Not classified

Based on calculation method, the classification criteria are not met

c) serious eve damage/irritation

Not classified

Based on calculation method, the classification criteria are not met

d) respiratory or skin sensitisation

The product is classified: Skin Sens. 1B H317

e) germ cell mutagenicity

Not classified

Based on calculation method, the classification criteria are not met

f) carcinogenicity

Not classified

Based on calculation method, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on calculation method, the classification criteria are not met

h) STOT-single exposure

Not classified

Based on calculation method, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on calculation method, the classification criteria are not met

j) aspiration hazard

Not classified

Based on calculation method, the classification criteria are not met

Toxicological information of the main substances found in the product:



C.I.Disperse Yellow 54, CAS: 17772-51-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg Test: LD50 - Route: Skin - Species: Rat > 5000 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rat > 5000 mg/kg - Notes: OECD 404

Test: Skin Irritant - Route: Skin - Species: Mouse Positive

c) serious eye damage/irritation:

Test: Eye Irritant - Route: OCULARE - Species: Rabbit Negative - Notes: OECD 405

d) Respiratory / skin sensitization:

Path: dermal - species: mouse positive - source: ECHA - comments: OECD 429

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (CAS 2634-33-5)

a) acute toxicity

Oral LD50 Rat = 1020 mg/kg (NZ CCID)

b) skin corrosion/irritation:

Not available

c) serious eye damage/irritation:

Not available

d) Respiratory / skin sensitization:

Not available

SECTION 12: Ecological information

12.1. Toxicity

C.I. Disperse Yellow 54, CAS: 17772-51-9

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 180 mg/l - Duration h: 96 - Notes: Pimephales promelas Endpoint: NOEC - Species: Daphnia > 0.07 mg/l - Duration h: 504 - Notes: Daphnia Magna - OECD 211 (mortalità)

Endpoint: NOEC - Species: Daphnia > 0.07 mg/l - Duration h: 504 - Notes: Daphnia Magna - OECD 211 (mortalità)

Endpoint: EC50 - Species: Algae > 0.412 mg/l - Duration h: 72 - Notes: Desmodesmus subspicatus - OECD 201

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Algae > 0.412 mg/kg - Duration h: 72 - Notes: Desmodesmus subspicatus - OECD 201

f) Effects in sewage plants:

Endpoint: EC50 - Species: Active sludges > 1000 mg/l - Duration h: 3

1,2-benzisothiazol-3(2H)-one (CAS 2634-33-5)

EU - Ecolabel (66/2010) – Detergent Not biodegradable under anaerobic conditions Ingredient Database - Anaerobic Degradation

EU - Ecolabel (66/2010) – Detergent Inherently biodegradable according to OECD guidelines Ingredient Database - Aerobic Degradation

12.2. Persistence and degradability

C.I.Disperse Yellow 54, CAS: 17772-51-9

Biodegradability: Non-readily biodegradable - Test: jk01 - Duration h: JK01 - %: 0 - Notes: N.A

12.3. Bioaccumulative potential



Disperse Yellow 54, 3-hydroxy-2-(3-hydroxy-2-quinolyl)-1H-inden-1-one - CAS: 17772-51-9 Bioaccumulation: Bioaccumulative - Test: Kow - Partition coefficient 4.8 - Duration h: N.A. - Notes: N.A

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. Dispose of waste product or used containers according to local regulations.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number

ADR-UN number: not applicable IATA-Un number: not applicable IMDG-Un number: not applicable

14.2. UN proper shipping name

ADR-Shipping Name: not applicable not applicable lATA-Shipping Name: not applicable lATA-Technical name: not applicable not applicable lMDG-Shipping Name: not applicable lMDG-Technical name: not applicable

14.3. Transport hazard class(es)

ADR-Label: not applicable lATA-Label: not applicable lMDG-Label: not applicable

14.4. Packing group

ADR-Packing Group: not applicable IATA-Packing group: not applicable IMDG-Packing group: not applicable

14.5. Environmental hazards

ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No

14.6. Special precautions for user

ADR-Tunnel Restriction Code: not applicable IATA-Passenger Aircraft: not applicable IATA-Cargo Aircraft: not applicable



IMDG-Page:not applicableIMDG-EMS:not applicableIMDG-MFAG:not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Nο

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) Nr. 2017/776 (10. ATP CLP)

Regulation (EU) Nr. 2018/699 (11. ATP CLP)

Regulation (EU) Nr. 2018/1480 (13. ATP CLP)

Regulation (EU) Nr. 2019/521 (12. ATP CLP)

Regulation (EU) Nr. 2020/217 (14. ATP CLP)

Regulation (EU) Nr. 2020/1182 (15. ATP CLP)

Regulation (EU) Nr. 2021/643 (16. ATP CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

Restriction 28

Restriction 72

Volatile Organic compounds - VOCs = 1.12 %

Volatile Organic compounds - VOCs = 11.21 g/Kg

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.00

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1



None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Key or legend to abbreviations and acronyms

CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS)

Full text of phrases referred to under sections 2 and 3

H302: Harmful if swallowed.

H315: Causes skin irritation

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H400: Very toxic to aquatic life

This safety data sheet has been completely updated in compliance to Regulation 2015/830.

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

ADR: European Agreement concerning the International Carriage of Dangerous

Goods by Road.

ATE: Acute toxicity estimates

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.



ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.

According to Regulation (EC) No 1907/2006, Annex II,

Amended by COMMISSION REGULATION (EU) 2020/878,

According to REGULATION (EC) No 1272/2008

Antifreeze coolant

Version 1.0

Issue date: 12-08-2022

Revision date: 12-08-2022 SDS Record Number: CSSS-TCO-010-152210

Section 1 Identification of the substance/mixture and of the company/undertaking

	. ,
1.1 Product identifier:	
Identification on the label/Trade name:	Antifreeze coolant
Additional identification:	Nanoform is NOT covered by this SDS.
UFI:	N/A
Identification of the product:	See section 3
Index Number:	See section 3
REACH registration No.:	See section 3
1.2 Relevant identified uses of the substance	or mixture and uses advised against:
1.2.1 Identified uses:	
Coolant.	
1.2.2 Uses advised against:	
Not available.	
1.3 Details of the supplier of the safety data sh	neet:
Supplier(Only representative):	-
Supplier(Manufacturer):	Shanwei BYD Industrial Co., Ltd
Address:	No. 22 Sanhe Road, Hongcaoyuan District, High-tech Zone, Shanwei City,
	Guangdong Province, China
Contact person(E-mail):	-
Telephone:	+86-755-84835503
Fax:	-
1.4 Emergency telephone Number:	
+86-755 89888888 Only available during office	hours (9:00a.m17:30p.m.)

Available outside office hours?

YES NO Χ

Section 2 Hazards Identification

2.1 Classification of the substance or mixture:

2.1.1 Classification of the mixture:

The mixture is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Acute Tox. 4	H302

For full text of H- phrases: see section 2.2.

2.2 Label elements:

Product name: Antifreeze coolant SDS EU Version #: 1.0 1/8

Revision date: 12-08-2022. Issue date: 12-08-2022.

Hazard pictogram(s):



Signal word: Warning

H302: Harmful if swallowed. Hazard statement(s):

Precautionary statement(s): P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P301 + P312: IF SWALLOWED: Call a POISON CENTER/doctor/... if you feel

unwell.

P330: Rinse mouth.

P501: Dispose of contents/container in accordance with

local/regional/national/international regulations.

Supplemental Hazard information (EU)

Not applicable.

2.3 Other hazards:

The mixture does not contain PBT/vPvB substance.

The mixture does not contain endocrine disruptor.

Section 3 Composition/information on ingredients

Substance/Mixture:

Mixture

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration	Classification	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)
Ethylene glycol	N/A	107-21-1	203-473-3	54~54.5%	H302	N/A
Water	N/A	7732-18-5	231-791-2	44.~44.6%	Not Classified	N/A
Sodium 2-ethylhexanoate	N/A	19766-89-3	243-283-8	0.6%	H361	N/A
sodium hydrogen sebacate	N/A	14047-57-5	N/A	0.6%	Not available.	N/A
sodium 4-nitrobenzoate	N/A	3847-57-2	N/A	0.1%	Not available.	N/A
SODIUM METASILICATE NONAHYDRATE	N/A	13517-24-3	N/A	0.1%	H3141B H335	N/A
1H-Benzotriazole	N/A	95-14-7	202-394-1	0.03%	H302 H319 H411	N/A
REACTIVE VIOLET 5	N/A	12226-38-9	235-434-1	0.0005%	Not Classified	N/A

^{0.7%} of the mixture consists of component (s) of unknown toxicity.

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

SDS EU Product name: Antifreeze coolant Revision date: 12-08-2022. 2/8

Version #: 1.0 Issue date: 12-08-2022.

^{0.7%} of components with unknown hazards to the aquatic environment.

Keep patient calm, remove to fresh air, seek medical attention.

4.1.2 In case of skin contact:

Wash thoroughly with soap and water.

4.1.3 In case of eyes contact:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

4.1.4 In case of ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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

Harmful if swallowed.

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

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Dry powder
Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the

substance or mixture

In case of fire, the following can be released: carbon monoxide, carbon dioxide.

5.3 Advice for firefighters: In the event of fire, wear self-contained breathing apparatus. Use personal

protective equipment. Wear chemical resistant oversuit. Cool containers / tanks

with water spray.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Prevent further leakage or spillage if safe to do so. Keep away from

Incompatible products.

6.1.2 For emergency responders: Evacuate personnel to safe areas. Keep people away from and upwind of

spill/leak. Ventilate the area. Wear suitable protective clothing.

6.2 Environmental Precautions: Should not be released into the environment. Do not flush into surface water or

sanitary sewer system. If the product contaminates rivers and lakes or drains

inform respective authorities.

6.3 Methods and material for Containment

and Cleaning up:

For small amounts: Pick up with suitable absorbent material (e.g. sand,

sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in

accordance with regulations.

For large amounts: Pump off product. Correctly dispose of recovered product

immediately.

6.4 Reference to other sections: See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:Use only equipment and materials which are compatible with the product. Keep

away from Incompatible products. To avoid thermal decomposition, do not

overheat. Preferably transfer by pump or gravity.

7.1.2 Advice on general occupational

hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

Keep container tightly closed and dry; store in a cool place. Protect from air.

7.2 Conditions for safe storage, including any incompatibilities:

Protect from atmospheric humidity. Protect contents from the effects of light.

 SDS EU 3 / 8

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters:

8.1.1 Occupational exposure limits:

				Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value		
						(15-min	ute reference ¡	period)
Country	Substance	EC No.	CAS No.	ppm	mg/m³	ppm	mg/m³	Note
EU	Ethylene glycol	203-473-3	107-21-1	20	52	40	104	-

8.1.2 Additional exposure limits under the

Not available.

conditions of use:

8.1.3 DNEL/DMEL and PNEC-Values:

Not available.

8.2 Exposure controls:

8.2.1Appropriate engineering controls:

Ensure adequate ventilation. Apply technical measures to comply with the

occupational exposure limits.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Skin protection

Hand protection: Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct

> contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other Manufacturer's directions for

use should be observed because of great diversity of types.

Body protection: Body protection must be chosen depending on activity and possible exposure,

e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in

case of splashes or EN ISO 13982 in case of dust).

Wear respiratory protection if ventilation is inadequate. Gas filter for Respiratory protection:

gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387

Type A)

Thermal hazards: Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls: Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance: Liauid Colour: **Fuchsia** Odour: Odorless **Odour threshold:** Not available pH: 7.5~9.5 -40°C Melting point/range (°C): 108°C Boiling point/range (°C):

Flash point (°C): Not applicable **Evaporation rate:** Not available Flammability limit - lower (%): Not available Flammability (solid, gas): Not available Ignition temperature (°C): Not available

Product name: Antifreeze coolant

SDS FU Version #: 1.0 Issue date: 12-08-2022. Revision date: 12-08-2022.

Upper/lower explosive limits: Not available Vapour pressure (20°C): Not available Not available Vapour density: **Relative Density:** 1.05~1.10 Bulk density (kg/m³): Not available Not available Water solubility (g/l): n-Octanol/Water (log Po/w): Not available Not available Auto-ignition temperature: **Decomposition temperature:** Not available Viscosity, dynamic (mPa.s): Not available **Explosive properties:** Not available Oxidising properties: Not available

9.2. Other information:

Fat solubility(solvent-oil to be specified) Not available

etc:

Not available Surface tension: Not available Dissociation constant in water(pKa): **Oxidation-reduction Potential:** Not available

VOC:

Section 10 Stability and reactivity

10.1 Reactivity: The substance is stable under normal storage and handling conditions.

10.2 Chemical stability: Stable at room temperature in closed containers under normal storage and

handling conditions.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: Incompatible materials. Avoid daylight. Disregard of the conditions mentioned

may result in undesirable decomposition reactions.

10.5 Incompatible materials: Strong oxidizing agents.

10.6 Hazardous decomposition products: Carbon monoxide, carbon dioxide.

Section 11 Toxicological information

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

Acute toxicity:

ATE_{mix}(oral): Not available Not available ATE_{mix} (inhalation): ATE_{mix}(Dermal): Not available LD50(Oral, Rat): Not available LC50(Inhalation, Rat): Not available LD50(Dermal, Rabbit): Not available Skin corrosion/Irritation: Not classified Serious eye damage/irritation: Not classified Respiratory or skin sensitization: Not classified Germ cell mutagenicity: Not classified Not classified Carcinogenicity: Reproductive toxicity: Not classified STOT- single exposure: Not classified

Product name: Antifreeze coolant

SDS EU Version #: 1.0 Issue date: 12-08-2022. Revision date: 12-08-2022. 5/8

STOT-repeated exposure: Not classified

Aspiration hazard: May be fatal if swallowed and enters airways.

11.2 Information on other hazards

Endocrine disrupting properties The mixture does not contain endocrine disruptor.

Other information Not applicable

Section 12 Ecological information

12.1 Toxicity:

Ethylene glycol (CAS#107-21-1)

Acute (short-term) toxicity:

LC50(96h, Fish): > 72 860 mg/L EC50(48h, Crustacea): > 100 mg/L EL50(72h, Algae/aquatic plants): Not available

Chronic (long-term) toxicity:

NOEC(Fish): Not available NOEC(Crustacea): >= 1000 mg/LNOEC(Algae/aquatic plants): > 100 mg/L 12.2 Persistence and degradability: Not available. Not available. 12.3 Bioaccumulative potential: 12.4 Mobility in soil: Not available.

12.5 Results of PBT and vPvB assessment: The mixture does not contain PBT / vPvB substance. 12.6 Endocrine disrupting properties: The mixture does not contain endocrine disruptor.

12.7 Other adverse effects: Not available. 12.8 Additional information Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods:

Dispose of in accordance with all applicable local and national regulations. Use recovery/recycling where feasible, otherwise incineration is the recommended method of disposal. Empty containers may contain hazardous residues. Do not cut, puncture or weld on or near to the container. Labels should not be removed from containers until they have been cleaned. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.

Section 14 Transport information					
	Land transport (ADR/RID)	Inland waterways (ADN)	Sea transport (IMDG)	Air transport (ICAO/IATA)	
14. 1 UN number or ID number	Not regulated	Not regulated	Not regulated	Not regulated	
14.2 UN Proper shipping name	Not regulated	Not regulated	Not regulated	Not regulated	
14.3 Transport hazard	Not regulated	Not regulated	Not regulated	Not regulated	

Product name: Antifreeze coolant Issue date: 12-08-2022. Version #: 1.0 Revision date: 12-08-2022.

Class(es)				
14.4 Packing group	Not regulated	Not regulated	Not regulated	Not regulated
14.5 Environmental hazards	No	No	No	No
14.6 Special precautions for user	See section 2.2	See section 2.2	See section 2.2	See section 2.2
14.7 Maritime transport in bulk according to IMO instruments	Not regulated	Not regulated	Not regulated	Not regulated

Section 15 Regulatory information

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

Relevant information regarding authorization: Not applicable. Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed.

For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical safety assessment YES NO Χ

Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by (EU) 2020/878

16.2 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation for rail International transportation of Dangerous goods

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: Code international maritime dangerous goods code

ICAO: International Civil Aviation Organization IATA: International Air Transport Association

UFI: Unique Formula Identifier LC50: median lethal concentration

EC50: The effective concentration of substance that causes 50% of the maximum response.

NOEC: No Observed Effect Concentration

DNEL: derived no-effect level

PNEC: predicted no-effect concentration

16.3 Key literature references and sources for data

ECHA Registered substances data

16.4 Classification and procedure used to derive the classification for mixtures according to Regulation (EC)

1272/2008 [CLP]

Classification according to Regulation (E	Classification procedure		
Acute Tox. 4	H302	Calculation method	

16.5 Relevant H-statements (number and full text):

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H361: Suspected of damaging fertility or the unborn child

H411: Toxic to aquatic life with long lasting effects.

Product name: Antifreeze coolant SDS EU Version #: 1.0 Issue date: 12-08-2022. Revision date: 12-08-2022.

16.6 Training instructions:

Not applicable.

16.7 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.8 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Author: Hangzhou REACH Technology Group Co., Ltd. Website:www.cirs-group.com Tel:0571-87206555 Email:info@cirs-group.com