

**Safety Data Sheet (Regulation (EC) n. 1907/2006 (REACH))
SOCOSURF TCS**

Regulation (EU) n. 2020/878

Safety Data Sheet date: 2/4/2024, version 9

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name: SOCOSURF TCS
SDS code: P61808
UFI: 2G5U-V39E-0R57-0DED

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

Recommended use:

Passivation
Industrial uses

Uses advised against:

No uses advised against are identified.

1.3. Details of the supplier of the safety data sheet**Manufacturers:**

Socomore SASU

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Competent person responsible for the safety data sheet:

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1.4. Emergency telephone number

France : ORFILA (INRS) +33 (0)1 45 42 59 59

International : CHEMTEL +1-813-248-0585.

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****EC regulation criteria 1272/2008 (CLP)**

⚠ Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

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Warning

Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves and eye/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.

P337+P313 If eye irritation persists: Get medical advice/attention.

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
$\geq 1\%$ - $< 3\%$	DIPOTASSIUM	CAS: 16923-95-8	⚠ 3.1/3/Oral Acute Tox. 3 H301
	HEXAFLUOROZIRCONATE	EC: 240-985-6 REACH No.: 01-2119978269-18	⚠ 3.3/1 Eye Dam. 1 H318

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

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In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting. Obtain a medical examination.

In case of 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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

No particular treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

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.

Burning produces heavy smoke.

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

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

Don't use empty container before they have been cleaned.

Before making transfer operations, ensure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

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

Occupational exposure limit values

DIPOTASSIUM HEXAFLUOROZIRCONATE - CAS: 16923-95-8

- OEL Type: National - TWA: 2.5 mg/m³ - Notes: France - Indicative réglementaire

- OEL Type: TWA - TWA: 2.5 mg/m³ - Notes: EU - Indicative

- OEL Type: National - TWA: 5 mg/m³ - STEL: 10 mg/m³ - Notes: WEL (Great Britain)

DNEL Exposure Limit Values

DIPOTASSIUM HEXAFLUOROZIRCONATE - CAS: 16923-95-8

Worker Industry: 6.2 mg/m³ - Worker Professional: 6.2 mg/m³ - Exposure: Human

Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 6.2 mg/m³ - Worker Professional: 6.2 mg/m³ - Exposure: Human

Inhalation - Frequency: Short Term, systemic effects

Worker Industry: 6.2 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Industry: 89 mg/kg b.w./day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 89 mg/kg b.w./day - Exposure: Human Dermal - Frequency: Short Term, systemic effects

PNEC Exposure Limit Values

DIPOTASSIUM HEXAFLUOROZIRCONATE - CAS: 16923-95-8

Target: Fresh Water - Value: 0.163 mg/l

Target: Marine water - Value: 0.163 mg/l

Target: Freshwater sediments - Value: 28.86 mg/kg

Target: Marine water sediments - Value: 5.77 mg/kg

Target: Soil (agricultural) - Value: 22.5 mg/kg

Target: Microorganisms in sewage treatments - Value: 1.77 mg/l

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Biological Exposure Index
N.A.

8.2. Exposure controls

See below, example of PPE to use.

Eye protection:

Safety goggles (EN 166)

Protection for skin:

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

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

Other conditions affecting workers exposure:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid	--	--
Colour:	Clear	--	--
Odour:	N.A.	--	--
Melting point/freezing point:	N.A.	--	--
Boiling point or initial boiling point and boiling range:	100°C	--	--
Flammability:	N.A.	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point (°C):	Not Relevant	--	--
Auto-ignition temperature:	Not Relevant	--	--
Decomposition temperature:	Not Relevant	--	--
pH:	2.5	--	--

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Kinematic viscosity:	N.A.	--	--
Solubility in water:	Not Relevant	--	--
Solubility in oil:	Not Relevant	--	--
Partition coefficient n-octanol/water (log value):	Not Relevant	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	Not Relevant	--	--
Relative vapour density:	Not Relevant	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

No other relevant information

Volatile Organic compounds - VOCs = 0 g/l

N.A. = not available

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 hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the product:

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Acute toxicity

Not classified

Based on available data, the classification criteria are not met

ATEmix - Oral 3367 mg/kg bw

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Skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

Serious eye damage/irritation

The product is classified: Eye Irrit. 2 H319

Respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

Germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

Carcinogenicity

Not classified

Based on available data, the classification criteria are not met

Reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

Aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

DIPOTASSIUM HEXAFLUOROZIRCONATE - CAS: 16923-95-8

Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 25 mg/kg

Test: LD50 - Route: Oral - Species: Rat < 200 mg/kg

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

Other toxicological information:

DIPOTASSIUM HEXAFLUOROZIRCONATE

Eye contact:

Irritant, risk of serious injury

chromosome aberration assay (in vitro) - mammalian cells:

Positive

Other information: Chronic health hazard:

Risk of serious eye damage

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SECTION 12: Ecological information

12.1. Toxicity

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

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Not classified for environmental hazards

Based on available data, the classification criteria are not met

DIPOASSIUM HEXAFLUOROZIRCONATE - CAS: 16923-95-8

a) Aquatic acute toxicity:

Endpoint: NOEC - Species: Algae = 0.1 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata

Endpoint: EC50 - Species: Algae = 10.66 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata

Endpoint: NOEC - Species: Daphnia = 100 mg/l - Duration h: 48

Endpoint: EC50 - Species: Daphnia = 151.4 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish = 172 mg/l - Duration h: 96 - Notes: Danio rerio

Endpoint: NOEC - Species: Fish = 100 mg/l - Duration h: 96 - Notes: Danio rerio

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

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. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

No harmful effects expected.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

Codes of wastes (Décision 2001/573/EC, Directive 2006/12/EEC, Directive 94/31/EEC on hazardous waste):

06 01 99 wastes not otherwise specified

SECTION 14: Transport information

14.1. UN number or ID number

Not classified as dangerous in the meaning of ADR, IATA and IMDG transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

ADR-Environmental Pollutant: No

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IMDG-Marine pollutant: No

14.6. Special precautions for user

N.A.

14.7. Maritime transport in bulk according to IMO instruments

N.A.

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) 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) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

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

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

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

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

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

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 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:

No restriction.

Listed or in compliance with the following international inventories:

Labelling of detergents (EC Regulations 648/2004 and 907/2006):

N.A.

Labelling of biocides (Regulations 1896/2000, 1687/2002, 2032/2003, 1048/2005, 1849/2006,

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1451/2007 and Directive 98/8/EC):

N.A.

N.A.

Where applicable, refer to the following regulatory provisions :

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

1999/13/EC (VOC directive)

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

SECTION 16: Other information

N.A.: Not Applicable or Not Available

Full text of phrases referred to in Section 3:

H301 Toxic if swallowed.

H318 Causes serious eye damage.

Hazard class and hazard category	Code	Description
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2

This safety data sheet has been completely updated in compliance to Regulation 2020/878.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

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Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Eye Irrit. 2, H319	Calculation method

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

CCNL - Appendix 1

Insert further consulted bibliography

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SOCOMORE strongly advises every recipient of this safety data sheet to read it carefully and to consult experts in the field if necessary or appropriate, in order to understand the information it contains, notably the possible dangers associated with this product. The users must ensure the conformity and completeness of this information with regards to their specific use of the product.

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 responsibility of the purchaser/user to ensure that their activities conform with current legislation in force.

The information is considered correct, but it is not exhaustive and it shall be used only as a guide which is based on the current knowledge of the substance or mixture and it is applicable to the safety precautions appropriate for the product.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
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

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	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.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
STOT SE:	May cause drowsiness or dizziness
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.