Regulation (EU) n. 2020/878

Safety Data Sheet date: 10/11/2022, version 9

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

1.1. Product identifier

Trade name: AP-988 SDS code: P60641

UFI: 1A5K-TRN8-KM5J-6XT2

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

Recommended use:

Deoxidizer

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

Zone Industrielle du Prat - CS 23707 - 56037 VANNES CEDEX - France

Tel: +33 (0)2 97 43 76 83 - Fax: +33 (0)2 97 54 50 26

Socomore Ireland Ltd. - Meenane, Watergrasshill, Co. Cork, Ireland - Tel +353 21 4889922 / Fax +353 21 4889923 / ireland@socomore.com

Distributors:

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Competent person responsible for the safety data sheet:

techdirsocomore@socomore.com

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, Skin Irrit. 2, Causes skin irritation.
- Warning, Eye Irrit. 2, Causes serious eye irritation.
- Warning, STOT SE 3, May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements:

P261 Avoid breathing vapours.

P264 Wash hands thoroughly after handling.

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

P312 Call a POISON CENTER if you feel unwell.

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

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH208 Contains 1,3-DIETHYL-2-THIOUREA. May produce an allergic reaction.

Contains

Citric acid

TRIAMMONIUM CITRATE

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 >= 0.1% Other Hazards:

No other hazards

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
>= 25% - < 30%	Citric acid	CAS: EC: REACH No.:	77-92-9 201-069-1 01- 2119457026 -42	
>= 12.5% - < 15%	TRIAMMONIUM CITRATE	CAS: EC: REACH No.:	3458-72-8 222-394-5 01-	 \$\daggeq 3.3/2\$ Eye Irrit. 2 H319 \$\daggeq 3.8/3\$ STOT SE 3 H335 \$\daggeq 3.2/2\$ Skin Irrit. 2 H315

			2120831663 -55	
>= 0.1% - < 0.25%	1,3-DIETHYL-2- THIOUREA	CAS: EC: REACH No.:	01-	

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.

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 opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting. Obtain a medical examination.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

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.

Use localized ventilation system.

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

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

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contamined 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

1,3-DIETHYL-2-THIOUREA - CAS: 105-55-5

- OEL Type: National - TWA: 2.5 mg/m3 - Notes: France, INRS

DNEL Exposure Limit Values

1,3-DIETHYL-2-THIOUREA - CAS: 105-55-5

Worker Industry: 0.14 mg/m3 - Consumer: 0.04 mg/m3 - Exposure: Human Inhalation -

Frequency: Long Term, systemic effects

Worker Industry: 2.08 mg/kg - Consumer: 1.04 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects

Consumer: 0.02 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

Citric acid - CAS: 77-92-9

Target: Fresh Water - Value: 0.44 mg/l

Target: Freshwater sediments - Value: 0.044 mg/l Target: Freshwater sediments - Value: 7.52 mg/kg Target: Marine water sediments - Value: 0.752 mg/kg

Target: Soil (agricultural) - Value: 29.2 mg/kg

1,3-DIETHYL-2-THIOUREA - CAS: 105-55-5

Target: Fresh Water - Value: 0.033 mg/l Target: Marine water - Value: 0.0033 mg/l

Target: Microorganisms in sewage treatments - Value: 0.2 mg/l

Target: Freshwater sediments - Value: 0.25 mg/kg dw Target: Marine water sediments - Value: 0.025 mg/kg dw

Target: Soil - Value: 0.03 mg/kg dw

Target: Water (intermittent discharge) - Value: 0.560 mg/l

Biological Exposure Index

N.A.

8.2. Exposure controls

See below, example of PPE to use.

Eye protection:

Face protection umbrella. Face protection shield. (EN 166)

Face protection shield.

Use closed fitting safety goggles, don't use eye lens.

Protection for skin:

Chemical protection clothing. (type 3 - EN14605) Chemical protection clothing. (type 6 - EN13034)

Protection for hands:

Suitable gloves type: NF EN374

NBR (nitrile rubber).

PVC (polyvinyl chloride).

NR (natural rubber, natural latex).

Butyl rubber (isobutylene-isoprene copolymer)

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

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:	Light yellow		
Odour:	N.A.		
Melting point/freezing point:	Not Relevant		
Boiling point or initial boiling point and boiling range:	47°C		
Flammability:	N.A.		
Lower and upper explosion limit:	N.A.		
Flash point (°C):	N.A.		
Auto-ignition temperature:	N.A.		
Decomposition temperature:	N.A.		
pH:	3	ISO 4316, ASTM E70	
Kinematic viscosity:	N.A.		
Solubility in water:	N.A.		
Solubility in oil:	N.A.		
Partition coefficient n-octanol/water (log value):	N.A.		
Vapour pressure:	N.A.		
Density and/or relative density:	1.2		
Relative vapour density:	N.A.		

Particle characteristics:

Particle size:	N.A.	
	1	

9.2. Other information

No other relevant information

Volatile Organic compounds - VOCs = 0 g/l

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:

N.A.

Toxicological information of the main substances found in the product:

Citric acid - CAS: 77-92-9

Acute toxicity:

Test: LD50 - Route: Skin - Species: Rat = 2000 mg/kg Test: LD50 - Route: Oral - Species: Rat = 3000 mg/kg

rest. Ebbo - Route. Oral - opeoles. Nat - 5000 mg/kg

Test: LD50 - Route: Oral - Species: Mouse = 5400 mg/kg - Source: OECD, 401

Test: ATE - Route: Oral = 5400 mg/kg

Test: LD50 - Route: Inhalation - Species: Rat = 725 mg/kg
Test: LD50 - Route: Inhalation - Species: Mouse = 940 mg/kg

Test: LD50 - Route: Inhalation (dust, mist) - Species: guinea pig approx. 75 mg/l - Duration:

3'

STOT-repeated exposure:

Test: NOAEL - Route: Oral - Species: Rat = 4000 mg/kg - Duration: 10 days - Notes:

mg/kg/day, étude de toxicité chronique 2 ans

Test: LOAEL

- Route: Oral - Species: Rat = 8000 mg/kg - Duration: 10 days

1,3-DIETHYL-2-THIOUREA - CAS: 105-55-5

Acute toxicity:

Test: LD50 - Route: Oral - Species: Mouse = 930 mg/kg

Test: LD50 - Route: Skin - Species: Rat = 2.000 mg/kg - Notes: OCDE (402)

STOT-repeated exposure:

Test: NOAEL - Route: Oral - Species: Rat < 6.25 mg/kg

If not differently specified, the information required in Regulation (EU)2020/878 listed below must be considered as N.A.:

Acute toxicity;

Skin corrosion/irritation;

Serious eye damage/irritation;

Respiratory or skin sensitisation;

Germ cell mutagenicity;

Carcinogenicity;

Reproductive toxicity;

STOT-single exposure;

STOT-repeated exposure;

Aspiration hazard.

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

Other toxicological information:

Citric acid

Skin contact:

May cause irritation.

Eye contact:

Severe irritation

Inhalation - May irritate respiratory tracts.

-

1,3-DIETHYL-2-THIOUREA

Eye contact:

Risk of serious, severely irritating damage to the eyes.

In vitro Mammalian Cell Gene Mutation Test: Active

SECTION 12: Ecological information

12.1. Toxicity

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

Citric acid - CAS: 77-92-9
a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Daphnia = 1535 mg/l - Notes: Daphnia magna, OECD 202

Endpoint: LC50 - Species: Fish = 440 mg/l - Duration h: 48 - Notes: Leuciscus idus; OECD 203

Endpoint: EC50 - Species: Daphnia = 120 mg/l - Duration h: 72

Endpoint: EC50 - Species: bacteria > 100000 mg/l - Duration h: 16 - Notes: Pseudomonas putida

b) Aquatic chronic toxicity:

Endpoint: EC0 - Species: Algae = 425 mg/l - Notes: Scenedesmus quadricauda

Endpoint: NOEC - Species: Algae = 425 mg/l - Duration h: 192 - Notes: Scenedesmus quadricauda

1,3-DIETHYL-2-THIOUREA - CAS: 105-55-5

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 56 mg/l - Duration h: 48 - Notes: Daphnia magna Endpoint: LC50 - Species: Fish = 910 mg/l - Duration h: 96 - Notes: Brachydanio rerio Endpoint: EC50 - Species: Algae = 310 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish = 31.3 mg/l - Duration h: 1440 - Notes: Oncorhynchus mykiss Endpoint: NOEC - Species: Algae = 73 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata

c) Bacteria toxicity:

Endpoint: NOEC - Species: bacteria = 2 mg/l - Duration h: 672 - Notes: Boue activée

12.2. Persistence and degradability

Citric acid - CAS: 77-92-9

Biodegradability: Readily biodegradable - Test: OECD 301B - Duration: 28 days - %: 97 Biodegradability: Readily biodegradable - Test: OECD 301E - Duration: 19 days - %: 100

Biodegradability: Biological oxygen demand (BOD) - Notes: 526 mg/g Biodegradability: Chemical Oxygen Demand (COD) - Notes: 725 mg/g

TRIAMMONIUM CITRATE - CAS: 3458-72-8

Biodegradability: Biodegradable 1,3-DIETHYL-2-THIOUREA - CAS: 105-55-5

Biodegradability: Biodegradability rate - Duration: 28 days - %: 3

12.3. Bioaccumulative potential

Citric acid - CAS: 77-92-9 Log Pow -1.67

1,3-DIETHYL-2-THIOUREA - CAS: 105-55-5

Log Kow 0.57

12.4. Mobility in soil

TRIAMMONIUM CITRATE - CAS: 3458-72-8

low-polluting

1,3-DIETHYL-2-THIOUREA - CAS: 105-55-5

Surface tension 76,1 mN/m - Notes: mg/l 21,5 °C /1.000 mg/l (OCDE, 115)

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 >= 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 06* other acids

SECTION 14: Transport information

14.1. UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

NΑ

14.5. Environmental hazards

ADR-Environmental Pollutant: No 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)

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:

N.A.

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

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:

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H315 Causes skin irritation.

H312 Harmful in contact with skin.

H302 Harmful if swallowed.

H372 Causes damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 1	3.9/1	Specific target organ toxicity - repeated exposure, Category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

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]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H335	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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re-transmission of this document, in full or in part, must be limited to clearly identified individuals, either because they use the product, or to provide HSE information. Any communication of this document outside of this framework without our written consent is strictly forbidden.

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

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.