



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 03/04/2023 Revision date: 19/02/2025 Supersedes version of: 03/04/2023 Version: 2.0

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

1.1. Product identifier	
Product form	: Substance
Substance name	: Tretinoin
Chemical name	: Tretinoin
EC-No.	: 206-129-0
CAS-No. Product code	: 302-79-4 : 201600920
1.2. Relevant identified uses of the sub	estance or mixture and uses advised against
Relevant identified uses	
Use of the substance/mixture	: Scientific research and development Technical testing and analysis For professional use only
Function or use category	: Laboratory chemicals
0,1	
Uses advised against	
Restrictions on use	: Not for food, drug or home use
1.3. Details of the supplier of the safety	/ data sheet
European Directorate for the Quality of Medicin EDQM, Council of Europe 7, Allée Kastner, CS30026 F 67081 Strasbourg France T +33(0)388412035, F +33(0)388412771 sds@edqm.eu, www.edqm.eu	ies & Healthcare
1.4. Emergency telephone number	
Emergency number	: +33(0)390215608

SECTION 2: Hazards identification		
2.1. Classification of the substance or mixture		
Classification according to Regulation (EC) No. 1272/20	08 [CLP]	
Acute toxicity (oral), Category 4	H302	
Skin corrosion/irritation, Category 2	H315	
Serious eye damage/eye irritation, Category 2	H319	
Reproductive toxicity, Category 1B	H360	
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400	(M=100)
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410	(M=100)
Full text of H- and EUH-statements: see section 16		

Adverse physicochemical, human health and environmental effects

Harmful if swallowed. Very toxic to aquatic life with long lasting effects. May damage fertility or the unborn child. Causes serious eye irritation. Causes skin irritation.

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2.2. Label elements

Hazard pictograms (CLP)			
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	GHS07 GHS08 GHS09		
Signal word (CLP)	: Danger		
Hazard statements (CLP)	: H302 - Harmful if swallowed.		
	H315 - Causes skin irritation.		
	H319 - Causes serious eye irritation.		
	H360 - May damage fertility or the unborn child.		
	H410 - Very toxic to aquatic life with long lasting effects.		
Precautionary statements (CLP)	: P201 - Obtain special instructions before use.		
	P202 - Do not handle until all safety precautions have been read and understood.		
	P264 - Wash hands, forearms and face thoroughly after handling.		
	P270 - Do not eat, drink or smoke when using this product.		
	P273 - Avoid release to the environment.		
	P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing		
	P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.		
	P302+P352 - IF ON SKIN: Wash with plenty of water.		
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
	P308+P313 - IF exposed or concerned: Get medical advice/attention.		
	P321 - Specific treatment (see supplemental first aid instruction on this label).		
	P330 - Rinse mouth.		
	P332+P313 - If skin irritation occurs: Get medical advice/attention.		
	P337+P313 - If eye irritation persists: Get medical advice/attention.		
	P362+P364 - Take off contaminated clothing and wash it before reuse.		
	P391 - Collect spillage.		
	P405 - Store locked up.		
	P501 - Dispose of contents/container to hazardous or special waste collection point, in		
	accordance with local, regional, national and/or international regulation.		
a a i i	ackaging where the contents do not exceed 10ml.		
Hazard pictograms (CLP)			
	V		
	GHS08		

2.3. Other hazards

Other information

: Active substance (in pharmaceutical products). Warning - substance not yet tested completely.

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SECTION 3: Composition/information on ingredients

3.1. Substances			
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tretinoin	CAS-No.: 302-79-4 EC-No.: 206-129-0	≤ 100	Acute Tox. 4 (Oral), H302 (ATE=2000 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 1B, H360 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)

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 First-aid measures after inhalation	 In all cases of doubt, or when symptoms persist, seek medical attention. Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest. If the person feels unwell : Get medical advice/attention.
First-aid measures after skin contact	 Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Get medical advice if skin irritation persists.
First-aid measures after eye contact	: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth out with water (only if the person is conscious). Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER/doctor.
4.2. Most important symptoms and ef	fects, both acute and delayed
Symptoms/effects after skin contact Symptoms/effects after eye contact	Causes skin irritation.Causes serious eye irritation. Redness, pain.
4.3. Indication of any immediate med	ical attention and special treatment needed
No additional information available	

No additional information available

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media Unsuitable extinguishing media	 : Use extinguishing media appropriate for surrounding fire. Carbon dioxide. Water spray. Dry powder. Extinguishing blanket. : Do not use a heavy water stream. 		
5.2. Special hazards arising from the substance or mixture			
Hazardous decomposition products in case of fire	: Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases. Toxic fumes may be released.		
5.3. Advice for firefighters			
Firefighting instructions Protection during firefighting	 Prevent fire fighting water from entering the environment. 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		
General measures	: Avoid contact with skin, eyes and clothing.	
For non-emergency personnel		
Emergency procedures	: Evacuate unnecessary personnel.	
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. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up	
For containment Methods for cleaning up	Absorb with an inert material and place in an appropriate waste disposal container.Clean contaminated surfaces with an excess of water. Clean with the help of detergents.
6.4. Reference to other sections	

See Section 13 for disposal information.

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Additional hazards when processed Precautions for safe handling Hygiene measures	 Do not expose pregnant or breastfeeding women. Avoid all unnecessary exposure. Ensure good ventilation of the work station. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash hands before work breaks and after finishing work. 	
7.2. Conditions for safe storage, including any incompatibilities		
Storage conditions	: Store in a well-ventilated place. Keep container tightly closed. Keep away from heat and direct sunlight.	
Packaging materials	: Keep in original containers.	
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. Both local exhaust and general room ventilation are usually required. Material should be handled in a laboratory hood whenever possible.

Personal protection equipment

Eye and face protection

Eye protection:

Wear eye protection. Safety glasses with side shields. (EN 166)

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Skin protection

Skin and body protection:

Wear suitable protective clothing. Laboratory use : Lab coat. (EN 13034)

Hand protection:

Wear suitable gloves. Chemically resistant protective gloves. (EN 374)

Respiratory protection

Respiratory protection:

In case of dust formation use respirator with filter: P3

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Yellow. light orange.
Appearance	: Crystalline powder.
Molecular mass	: 300.4 g/mol
Odour	: Not available
Odour threshold	: Not available
Melting point	: 182 °C
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
рН	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Water: < 0.1 g/l
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available
10.2. Chemical stability
No additional information available
10.3. Possibility of hazardous reactions
No additional information available
10.4. Conditions to avoid
No additional information available

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10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined i	in Regulation (EC) No 1272/2008
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Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Harmful if swallowed. Not classified (Lack of data) Not classified (Lack of data)
Tretinoin (302-79-4)	
LD50 oral rat	2000 mg/kg (RTECS No VH6475000)
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified (Lack of data)
Germ cell mutagenicity	: Not classified (Lack of data)
Carcinogenicity	: Not classified (Lack of data)
Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: Not classified (Lack of data)
STOT-repeated exposure	: Not classified (Lack of data)
Aspiration hazard	: Not classified (Lack of data)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity		
Hazardous to the aquatic environment, short–term : Very toxic to aquatic life. (acute) Hazardous to the aquatic environment, long–term : Very toxic to aquatic life with long lasting effects. (chronic)		
Tretinoin (302-79-4)		
LC50 - Fish [1]	0.00147 mg/l (96 Hours)	
NOEC chronic crustacea	0.0001 mg/l (Daphnia pulex)	
12.2. Persistence and degradability		
Tretinoin (302-79-4)		
Persistence and degradability	Rapidly degradable	
12.3. Bioaccumulative potential		
No additional information available		
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
No additional information available		

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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

No additional information available

accordance with ADR / IMDG / IATA		
ADR	IMDG	ΙΑΤΑ
14.1. UN number or ID number		
UN 3077	UN 3077	UN 3077
14.2. UN proper shipping name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Environmentally hazardous substance, solic n.o.s.
Transport document description	·	
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s., 9, III
14.3. Transport hazard class(es)	· ·	
9	9	9
14.4. Packing group		
Ш	Ш	Ш
14.5. Environmental hazards		
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes EmS-No. (Fire): F-A EmS-No. (Spillage): S-F	Dangerous for the environment: Yes

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	M7
Special provisions (ADR)	:	274, 335, 375, 601
Limited quantities (ADR)	:	5kg
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P002, IBC08, LP02, R001
Special packing provisions (ADR)	:	PP12, B3
Mixed packing provisions (ADR)	:	MP10
Portable tank and bulk container instructions (ADR)	:	T1, BK1, BK2, BK3

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Portable tank and bulk container special provisions	: TP33
(ADR)	
Tank code (ADR)	: SGAV, LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V13
Special provisions for carriage - Bulk (ADR)	: VC1, VC2
Special provisions for carriage - Loading, unloading	: CV13
and handling (ADR)	00
Hazard identification number (Kemler No.)	: 90
Orange plates	¹ 90
	<u>90</u> 3077
Tunnel restriction code (ADR)	: -
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Transport by sea	
Special provisions (IMDG)	274, 335, 966, 967, 969
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP02, P002
Special packing provisions (IMDG)	: PP12
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: BK1, BK2, BK3, T1
Tank special provisions (IMDG)	: TP33
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW23
Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y956
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 956
PCA max net quantity (IATA)	: 400kg
CAO packing instructions (IATA)	: 956
CAO max net quantity (IATA)	: 400kg
Special provisions (IATA)	: A97, A158, A179, A197, A215
ERG code (IATA)	: 9L
· · ·	
14.7 Maritime transport in bulk according t	o INICI Instruments

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)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

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

Not listed on the COUNCIL REGULATION (EC) 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 additional information available

SECTION 16: Other information

Indication of cha	anges	
Section	Changed item	Comments
	ERG code (IATA)	Added
	Special provisions (IATA)	Added
	CAO max net quantity (IATA)	Added
	CAO packing instructions (IATA)	Added
	PCA max net quantity (IATA)	Added
	PCA packing instructions (IATA)	Added
	PCA limited quantity max net quantity (IATA)	Added
	PCA Limited quantities (IATA)	Added
	PCA Excepted quantities (IATA)	Added
	Danger labels (IATA)	Added
	Proper Shipping Name (IATA)	Added
	Proper Shipping Name (IMDG)	Added
	Danger labels (IMDG)	Added
	EmS-No. (Spillage)	Added
	EmS-No. (Fire)	Added
	Limited quantities (IMDG)	Added
	Stowage and handling (IMDG)	Added
	Stowage category (IMDG)	Added
	Tank special provisions (IMDG)	Added
	Tank instructions (IMDG)	Added
	IBC special provisions (IMDG)	Added
	IBC packing instructions (IMDG)	Added
	Excepted quantities (IMDG)	Added
	Special provisions (IMDG)	Added
	Special provisions for carriage - Loading, unloading and handling (ADR)	Added
	Special provisions for carriage - Bulk (ADR)	Added

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Indication of changes		
Section	Changed item	Comments
	Special provisions for carriage - Packages (ADR)	Added
	Tank code (ADR)	Added
	Portable tank and bulk container special provisions (ADR)	Added
	Portable tank and bulk container instructions (ADR)	Added
	Mixed packing provisions (ADR)	Added
	Special packing provisions (ADR)	Added
	Packing instructions (ADR)	Added
	Vehicle for tank carriage	Added
	Revision date	Added
	Supersedes version of	Added
1.1	EC-No.	Added
1.1	CAS-No.	Added
1.1	Synonyms	Removed
1.2	Restrictions on use	Modified
1.2	Use of the substance/mixture	Modified
1.2	Main use category	Removed
2.1	Adverse physicochemical, human health and environmental effects	Modified
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified
2.2	Signal word (CLP)	Modified
2.2	Hazard pictograms (CLP)	Modified
2.2	Precautionary statements (CLP)	Modified
2.2	Hazard statements (CLP)	Modified
2.3	Other information	Added
4.1	First-aid measures after ingestion	Added
4.1	First-aid measures after inhalation	Added
4.1	First-aid measures general	Added
4.1	First-aid measures after eye contact	Modified
4.1	First-aid measures after skin contact	Modified
4.2	Symptoms/effects after skin contact	Added
4.2	Symptoms/effects after eye contact	Added
5.1	Unsuitable extinguishing media	Added
5.1	Suitable extinguishing media	Modified
5.2	Hazardous decomposition products in case of fire	Added
5.2	Fire hazard	Removed

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Indication of changes		
Section	Changed item	Comments
5.3	Protection during firefighting	Added
5.3	Firefighting instructions	Modified
6.1	Protective equipment	Added
6.1	General measures	Added
6.1	Emergency procedures	Modified
6.2	Environmental precautions	Added
6.3	For containment	Added
6.3	Methods for cleaning up	Added
6.4	Reference to other sections (8, 13)	Added
7.1	Additional hazards when processed	Added
7.1	Precautions for safe handling	Added
7.1	Hygiene measures	Added
7.2	Packaging materials	Added
7.2	Storage conditions	Added
7.3	Specific end uses	Removed
8.2	Eye protection	Added
8.2	Respiratory protection	Added
8.2	Hand protection	Modified
8.2	Skin and body protection	Modified
8.2	Appropriate engineering controls	Modified
9	Molecular mass	Added
9	Melting point	Added
9	Colour	Added
9	Appearance	Modified
10.1	Reactivity	Removed
10.3	Possibility of hazardous reactions	Removed
10.5	Incompatible materials	Removed
10.6	Hazardous decomposition products	Removed
11.1	ATE CLP (oral)	Modified
11.1	LD50 oral rat	Modified
12.1	Ecology - general	Removed
12.1	NOEC chronic crustacea	Added
12.1	LC50 - Fish [1]	Added
14.1	UN-No. (ADR)	Added
14.1	UN-No. (IMDG)	Added
14.1	UN-No. (IATA)	Added
14.2	Proper Shipping Name (ADR)	Added
14.3	Danger labels (ADR)	Added

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Indication of changes		
Section	Changed item	Comments
14.3	Class (ADR)	Added
14.4	Packing group (IMDG)	Added
14.4	Packing group (IATA)	Added
14.4	Packing group (ADR)	Added
14.6	Special packing provisions (IMDG)	Added
14.6	Packing instructions (IMDG)	Added
14.6	Transport category (ADR)	Added
14.6	Special provisions (ADR)	Added
14.6	Excepted quantities (ADR)	Added
14.6	Limited quantities (ADR)	Added
14.6	Tunnel restriction code (ADR)	Added
14.6	Hazard identification number (Kemler No.)	Added
14.6	Classification code (ADR)	Added

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H360	May damage fertility or the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Repr. 1B	Reproductive toxicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2

Safety Data Sheet (SDS), EU

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