TREHALOSE DIHYDRATE FOR BIOCHEMISTRY

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□□ (EU) 2020/878□ □□ □□□ REACH □□ (EC) 1907/2006□ □□
SDS Reference Number: 06350
□□ □□□□: 4/9/2014 □□ □□□□: 8/31/2026 □□ □□: 4/9/2015 □□: 1.0

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1.1. □□□□

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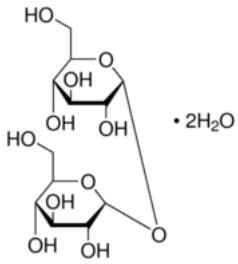
□□□	:	TREHALOSE DIHYDRATE FOR BIOCHEMISTRY
IUPAC □□	:	(2R,3S,4S,5R,6R)-2-(Hydroxymethyl)-6-[(2R,3R,4S,5S,6R)-3,4, 5-trihydroxy-6-(hydroxymethyl)oxan-2-yl]oxyoxane-3,4,5-triol
EC □□	:	202-739-6
CAS □□	:	6138-23-4
□□ □□	:	06350
□□ □□	:	Carbohydrate
□□□	:	C12H22O11.2H2O
□□ □□	:	
□□□	:	α-D-Glucopyranosyl-α-D-glucopyranoside, α,α-Trehalose , Mycose

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1.3. □□□□□□□□ □□□ □□

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2.1. □□□·□□□ □□

Regulation (EC) No.1272/2008 [CLP]□ □□ □□

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To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. □□□□□□□ □□□ □□□□ □□

□□ (EC) No. 1272/2008□ □□ □□ □□[CLP]

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2.3. □□ □□

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섹션 3: 구성성분의 명칭 및 함유량

3.1. 단일□질

물질 유형 : 단일구성물질

이름	식별정보	%
TREHALOSE DIHYDRATE	CAS 번호: 6138-23-4 EC 번호: 202-739-6	100

섹션 4: 응급조치요령

4.1. 응급□치요□

일반 응급 조치 : If you feel unwell, seek medical advice.

흡입했을 때 : 신선한 공기가 있는 곳으로 옮기고 호흡하기 쉬운 자세로 안정을 취하시오 . Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.

피부에 접촉했을 때 : 다량의 비누와 물로 부드럽게 씻어내시오. 피부 자극이 나타나면: 의학적인 조치/조언를 받으시오. Wash skin with plenty of water.

눈에 들어갔을 때 : 가능하면 콘택트렌즈를 제거하시오. 계속 씻으시오. 몇 분간 물로 조심해서 씻으시오. 눈에 자극이 지속되면: 의학적인 조치/조언을 받으시오.

먹었을 때 : Rinse mouth out with water. If you feel unwell, seek medical advice. 불편함을 느끼면 의료기관 (의사)의 진찰을 받으시오.

Self protection of the first-aider : 특정 위험성이 명확히 정의되지 않았더라도 , 응급처치자는 □드시 보안경, 장갑, 일□용 반면 마스크를 착용해야 합니다. 반복되거나 장시간 노출될 가능성이 있는 경우 추가적인 보호장비를 착용하시오 .

4.2. 급성 □ 만성□ 가장 □요한 □상 및 □과

흡입 후 증상/효과 : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure.

피부 접촉 후 증상/효과 : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.

눈 접촉 후 증상/□과 : None under normal conditions. Dust from this product may cause eye irritation.

섭취 후 증상/효과 : None under normal conditions.

4.3. 즉각□인치□ 및 특□ 치료 □요여□ 표시

Treat symptomatically.

섹션 5: 폭발·화재시 대처방법

5.1. 적절□ 소화□

적절한 소화제 : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray. Dry powder. Foam.

부적절한 소화제 : Do not use a heavy water stream.

5.2. 화학□질로□터 생□는 특□ 유해□

화재 위험 : No fire hazard.

폭발 위험 : No direct explosion hazard.

화재 시 위험한 분해성 물질 : Toxic fumes may be released.

5.3. 소방□의 화□진압 □ 주의□항

소방 지침 : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

화재 진압 중 보호 : Do not attempt to take action without suitable protective equipment. 자급식 호흡보호구. Complete protective clothing.

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□□ □□ : Wear recommended personal protective equipment.

□□ □□ : Ventilate spillage area. Evacuate unnecessary personnel.

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□□ □□ : Do not attempt to take action without suitable protective equipment. □□□ □□ □□□□ □□□□□. □ □ □□□ □□□ □□ 8: "□□□□ □ □□□□□"□ □□□□□.

□□ □□ : Stop release. Evacuate unnecessary personnel.

6.2. □□□ □□□□ □□ □□□ □□□□

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6.3. □□ □□ □□ □□

□□□ : Using a clean shovel, put the material in a dry container and cover without compressing it.

□□ □□ : Mechanically recover the product. Clear up rapidly by scoop or vacuum.

□ □□ □□□□ : Dispose of materials or solid residues at an authorized site.

6.4. □□ □□ □□

For further information refer to section 13.

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□□□□□□ : Ensure good ventilation of the work station. □□ □□□□ □□□□□. □, □□, □□□ □□ □□□ □□□.

□□ □□ : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. □ □□□ □□□ □□□ □□□, □□□□ □□□□ □□□. Always wash hands after handling the product.

7.2. □□□□ □□□ □□□ □□□ □□ □□

□□□ □□ : Keep in a cool, well-ventilated place away from heat.

□□ □□ : Store in original container. □□□ □□□ □□□□□. □□□ □□□ □□□□□. □□□ □□□□□.

□□□ : Always store product in container of same material as original container.

7.3. □□ □□ □□

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Ensure good ventilation of the work station.

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Wear recommended personal protective equipment.



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Chemical goggles or safety glasses

Skin protection

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Wear a mask

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Protective gloves

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Wear appropriate mask

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환경으로 배출하□ 마시오.

섹션 9: 물리화학적 특성

9.1. 기본□인 물□화학□ 특성□ 대한 □보

물리적 상태	:	고체
색상	:	White to off white.
외관	:	Powder.
분자량	:	378.34 g/mol
냄새	:	Odourless.
냄새 역치	:	자료없음
녹는점	:	97 – 99 °C
어는점	:	해당없음
초기 끓는점과 끓는점 범위	:	115.3 °C
인화성	:	불연성
폭발 하한계	:	해당없음
폭발 상한계	:	해당없음
인화점	:	해당없음
자연발화 온도	:	해당없음
분해 온도	:	자료없음
pH	:	4.5 – 6.5
pH 용액의 농도	:	10 %
점도(동점□)	:	해당없음
용해도	:	물: 68.9 g/100ml at 20 °C - Soluble
Partition coefficient n-octanol/water (Log Kow)	:	자료없음
증기압	:	자료없음
50°C에서의 증기압	:	자료없음
밀도	:	자료없음
비중	:	1.58
20°C에서의 상대 증기 밀도	:	해당없음
Particle size	:	자료없음

9.2. 그 밖□ 참고□항

자료 없음

섹션 10: 안정성 및 반응성

10.1. 반응

The product is non-reactive under normal conditions of use, storage and transport.

10.2. 화학 안정

Stable under normal conditions.

10.3. 유해 응의 능성

No dangerous reactions known under normal conditions of use.

10.4. 피해 할 조

직사광선. Air contact. Moisture.

10.5. 피해 할 물

자료 없음

10.6. 분해 생성 는 유 물질

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

섹션 11: 독성에 관한 정보

11.1. 규정 (EC) No 1272/2008에 의된, 해성 급에 한 정

급성 독성 (경구)	:	분류되지 않음
급성 독성 (경피)	:	분류되지 않음
급성 독성 (흡입)	:	분류되지 않음
피부 부식성 또는 자극성	:	분류되지 않음 pH: 4.5 – 6.5
심한 눈 손상 또는 극성	:	분류되지 않음 pH: 4.5 – 6.5
호흡기 또는 피부 과민성	:	분류되지 않음
생식세포 변이원	:	분류되지 않음
발암성	:	분류되지 않음
생식독성	:	분류되지 음
특정 표적장기 독성 (1회 노출)	:	분류되지 않음
특정 표적장기 독성 (반복 노출)	:	분류되지 음
흡인 유해성	:	분류되지 않음

TREHALOSE DIHYDRATE FOR BIOCHEMISTRY (6138-23-4)	
점도(동점도)	당없음

11.2. 기타 험 정

자료 없음

섹션 12: 환경에 미치는 영향

12.1. 독성

생태학 - 일반	:	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
급성 수생환경 유해성	:	분류되지 않음
만성 수생환경 유해성	:	분류되지 않음

12.2. 잔류□ 및 분□성

TREHALOSE DIHYDRATE FOR BIOCHEMISTRY (6138-23-4)	
잔류□ 및 분해성	□속 분해 가능

12.3. 생물 □축성

자료 없음

12.4. 토양 □동성

자료 없음

12.5. PBT 및 vPvB 평가 □과

자료 없음

12.6. 내분□ 장애 □성

자료 없음

12.7. 기타 □해 영□

자료 없음

섹션 13: 폐기시 주의사항

13.1. 폐기□ 처리□

지역 규정(폐기물)	:	Disposal must be done according to official regulations.
폐기물 처리법	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
하수 처리 권장 사항	:	Disposal must be done according to official regulations.
제품/포장 폐기 권고사항	:	Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
추가 정보	:	Do not re-use empty containers.
Ecological waste information	:	The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

섹션 14: 운송에 필요한 정보

ADR / IMDG / IATA / ADN / RID에 따름

14.1. UN 번□ 또는 ID 번호

운송 규정에서 비위험물

14.2. UN 적□ 선적□

적정 선적명 (ADR)	:	Not regulated
적정 선적명 (IMDG)	:	Not regulated
적정 선적명 (IATA)	:	Not regulated
적정 선적명 (ADN)	:	Not regulated
적정 선적명 (RID)	:	Not regulated

14.3. 운송□서의 □험성 □급

ADR

운송에서의 위험□ 등급 (ADR)	:	Not regulated

IMDG

운송에서의 위험□ 등급 (IMDG)	:	Not regulated

IATA

□□□□□ □□□ □□ (IATA) : Not regulated

ADN

□□□□□ □□□ □□ (ADN) : Not regulated

RID

□□□□□ □□□ □□ (RID) : Not regulated

14.4. □□□□

□□ □□ (ADR) : Not regulated
□□ □□(IMDG) : Not regulated
□□ □□ (IATA) : Not regulated
□□ □□(ADN) : Not regulated
□□ □□(RID) : Not regulated

14.5. □□ □□□

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EU □□

REACH □□□ XVII (□□ □□)

REACH □□□ XVII□ □□□□ □□

REACH □□□ XIV (□□ □□)

REACH □□□ XIV (□□ □□)□ □□□□ □□

REACH □□ □□ □□ (SVHC)

REACH □□ □□ □□□ □□□□ □□

PIC □□ (□□□□□□)

PIC □□□ □□□□ □□ (□□ EU 649/2012)

POP □□ (□□□ □□ □□□□)

POP □□□ □□□□ □□ (□□ EU 2019/1021)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

□□□□ □□(428/2009)

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

□□ □□□□ □□ (2019/1148)

Not listed on the Explosives Precursors list (EU)

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Not listed on the Drug Precursors list (EU)

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WGK : WGK 1, □□ □□ □□ □□ (Classification according to AwSV; ID □□ 11087).

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SZW-lijst van kankerverwekkende stoffen : □□□ □□□□ □□□□□.
SZW-lijst van mutagene stoffen : □□□ □□□□ □□□□□.
SZW-lijst van reprotoxische stoffen – Borstvoeding : □□□ □□□□ □□□□□.
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : □□□ □□□□ □□□□□.
SZW-lijst van reprotoxische stoffen – Ontwikkeling : □□□ □□□□ □□□□□.

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□□□ □□ □□ : Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)
Regulation of the Minister of Health of 25 August 2015 on the method of marking places, pipelines, and containers and tanks used for storing or containing hazardous substances or hazardous mixtures (J.o.L. 2015, item 1368 as amended)

15.2. □□ □□ □□□ □□

No chemical safety assessment has been carried out

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ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road

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ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	□□ □□ □
BOD	Biochemical oxygen demand (BOD)
CAS □□	□□□□ □□ □□ □□(CAS)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	□□□ □□ □□□
CSA	□□ □□ □□□ □□
DMEL	Derived Minimal Effect level
DNEL	□□ □□□ □□
EC □□	□□ □□□ □□
EC50	Median effective concentration
ED	□□□ □□□□
EN	□□ □□
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	□□□ □□ □□
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	□□ □□□ □□
PPE	□□ □□□
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	□□□□□□□□
STP	Sewage treatment plant
TF	□□□ □□
ThOD	Theoretical oxygen demand (ThOD)

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TLM	Median Tolerance Limit
TWA	Time Weighted Average
COV	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	□□ □□ □□□

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