

# Dithiobis(succinimidyl undecanoate) Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 8/22/2022 Revision date: 1/10/2025 Version: 2.0

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

#### 1.1. Product identifier

Product form : Substance

Dithiobis(succinimidyl undecanoate) Trade name : Dithiobis(succinimidyl undecanoate) Chemical name

: 147072-47-7 CAS-No. Product code · D537

Formula : C30H48N2O8S2

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

#### 1.2.1. Relevant identified uses

No additional information available

#### 1.2.2. Uses advised against

Recommended uses and restrictions : for research use only

#### 1.3. Details of the supplier of the safety data sheet

Doiindo Laboratories

Tabaru 2025-5 Mashiki-machi, Kamimashiki-gun, Kumamoto 861-2202, Japan

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

#### Adverse physicochemical, human health and environmental effects

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. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

#### 2.3. Other hazards

No additional information available

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Dithiobis(succinimidyl undecanoate)	(CAS-No.) 147072-47-7	< 100	Not classified

#### 3.2. Mixtures

Not applicable

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

: Rinse eyes with water as a precaution. First-aid measures after eye contact

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : Dust of the product, if present, may cause respiratory irritation after excessive inhalation

exposure. Although no appropriate human or animal health effects data are known to exist,

this material is expected to be an inhalation hazard.

Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in

combination with tight clothing.

Symptoms/effects after eye contact : None under normal conditions. Dust from this product may cause eye irritation.

Symptoms/effects after ingestion : None under normal conditions.

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

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard. Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper

protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent

material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

6.1.2. 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".

Emergency procedures : Evacuate unnecessary personnel.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

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

Methods for cleaning up : Mechanically recover the product.

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

#### 6.4. Reference to other sections

For further information refer to section 13.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

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Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

#### 7.2. Conditions for safe storage, including any incompatibilities

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

Storage conditions : Store in a refrigerator ( $0\sim5^{\circ}$ C). Keep tightly closed. Protect from moisture. Packed under

Nitrogen gas.

Packaging materials : Store always product in container of same material as original container.

#### 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:

Ensure good ventilation of the work station.

#### Personal protective equipment:

Wear recommended personal protective equipment.

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Personal protective equipment symbol(s):







#### **Environmental exposure controls:**

Avoid release to the environment.

### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid
Molecular mass : 628.84
Colour : White powder.
Odour : odourless.
Odour threshold : No data available

pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : Not applicable

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Boiling point : No data available Flash point : Not applicable Auto-ignition temperature : Not applicable : No data available Decomposition temperature Flammability : Non flammable. Vapour pressure : No data available Relative vapour density at 20°C : No data available Relative density : No data available

Solubility : Soluble in chloroform and dichloromethane

Partition coefficient n-octanol/water (Log Pow) : No data available Viscosity, kinematic : Not applicable Viscosity, dynamic : No data available Explosive properties : No data available Oxidising properties : No data available Explosive limits : Not applicable

#### 9.2. Other information

No additional information available

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

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

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

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

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

 Skin corrosion/irritation
 : Not classified

 Serious eye damage/irritation
 : Not classified

 Respiratory or skin sensitisation
 : Not classified

 Germ cell mutagenicity
 : Not classified

 Carcinogenicity
 : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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Viscosity, kinematic	Not applicable

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Hazardous to the aquatic environment, short–term

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

Not rapidly degradable

: Not classified

: Not classified

#### 12.2. Persistence and degradability

No additional information available

#### 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

#### 12.6. Other adverse effects

No additional information available

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Comply with applicable regulations for solid waste disposal. Disposal must be done

according to official regulations.

Additional information : Do not re-use empty containers.

#### **SECTION 14: Transport information**

In accordance with IATA

	IATA	
14.1. UN number		
	Not applicable	
14.2. UN proper shipping name		
	Not applicable	
14.3. Transport hazard class(es)		
	Not applicable	
14.4. Packing group		
	Not applicable	
14.5. Environmental hazards		
	Not applicable	
No supplementary information available		

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#### **SECTION 15: Regulatory information**

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

#### 15.1.1. EU-Regulations

Not listed on REACH Annex XVII

Not listed on the REACH Candidate List

Not listed on REACH Annex XIV (Authorisation List)

Not listed on the PIC list (Regulation EU 649/2012)

Not listed on the POP list (Regulation EU 2019/1021)

#### 15.1.2. National regulations

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)

Observe restrictions according Act on the Protection of Young People in Employment

(JArbSchG)

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic

environment

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed

SZW-lijst van reprotoxische stoffen –

: The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

Switzerland

Storage class (LK) : NG - Non-hazardous

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

#### **SECTION 16: Other information**

Abbreviations and acronyms:		
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	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
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	

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LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

The classification complies with : ATP 12

SDS EU (REACH Annex II)

This product is a chemical substance and is intended to be used by persons having chemical knowledge and skill at their own discretion and risk. This SDS was prepared with our best knowledge based on the information obtained. However, it does not provide any warranty on the data and the assessment of hazards and toxicity information be covered. For use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, region and country where the product be used.

In case you use the information on SDS for important decision, we strongly recommend you to confirm the source of information and the data with your own investigation. Please be noted that the physicochemical data and contents indicated in this SDS are not guaranteed values, only a guide. The cautions stated are for normal handling only. Additional care may be required for any special handling. The data and/or information used on this SDS may be updated by new knowledge and/or amendments of the conventional theory. Therefore, please check the most updated version of SDS which is available at www.dojindo.com.