

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Reference number: 03570 Issue date: 17.08.2023 Revision date: 17.08.2023 Supersedes version of: 31.05.2016 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier		
Product form Trade name EC-No. CAS-No. Product code Formula Chemical structure	: Substance : DITHIZONE AR : 200-454-1 : $60-10-6$ : $03570$ : $C13H12N4S$ : $S H H H H$	
Synonyms	: 1,5-Diphenylthiocarbazone; Diphenylthiocarbazone; Diazenecarbothioic acid, phenyl-, 2-phenylhydrazide; 1,5-Diphenyl-3-thiocarbazone	
1.2. Relevant identified uses of the substan	ce or mixture and uses advised against	
1.2.1. Relevant identified uses		
Industrial/Professional use spec	: Industrial	
Use of the substance/mixture	For professional use only : Laboratory chemicals Manufacture of substances	
1.2.2. Uses advised against		
No additional information available		
1.3. Details of the supplier of the safety dat	a sheet	
LOBA CHEMIE PVT.LTD. 107 Wode House Road, Jehangir Villa, Colaba 400005 Mumbai INDIA T +91 22 6663 6663 - F +91 22 6663 6699 info@lobachemie.com - www.lobachemie.com <b>1.4. Emergency telephone number</b>		
Emergency number	: + 91 22 6663 6663 (9:00am - 6:00 pm)	
	2 · 5 · 22 0000 0000 (0.000 m - 0.00 pm)	
SECTION 2: Hazards identification		
2.1. Classification of the substance or mixt	ure	
Classification according to Regulation (EC) No. 1	272/2008 [CLP]	
Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2 Full text of H- and EUH-statements: see section 16	H315 H319	
Adverse physicochemical, human health and environmental effects		
Causes skin irritation. Causes serious eye irritation.		
2.2. Label elements		
Labelling according to Regulation (EC) No. 1272/ Hazard pictograms (CLP)		

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ng
- Causes skin irritation.
- Causes serious eye irritation.
<ul> <li>Wash hands, forearms and face thoroughly after handling.</li> </ul>
Wear protective clothing, eye protection, face protection, protective gloves.
P352 - IF ON SKIN: Wash with plenty of water.
P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove
t lenses, if present and easy to do. Continue rinsing.
P313 - If skin irritation occurs: Get medical advice/attention.
P313 - If eye irritation persists: Get medical advice/attention.
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### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients		
3.1. Substances		
Substance type Name CAS-No. EC-No.	: Mono-constituent : DITHIZONE : 60-10-6 : 200-454-1	
Name	Product identifier	%
DITHIZONE	CAS-No.: 60-10-6 EC-No.: 200-454-1	100

3.2. Mixtures

Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Wash with plenty of water/ Wash contaminated clothing before reuse. Get medical advice/attention. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	<ul> <li>Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. If eye irritation persists: Get medical advice/attention.</li> </ul>
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effective states and effective symptometry and effective symptometry symptometry and effective symptometry symptometry and effective symptometry symptometry and effective symptometry sympto	ffects, both acute and delayed
Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	<ul> <li>Causes skin irritation. Irritation.</li> <li>Causes serious eye irritation. Eye irritation.</li> <li>Swallowing a small quantity of this material will result in serious health hazard.</li> </ul>

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

Treat symptomatically.

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SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media Unsuitable extinguishing media	<ul><li>Carbon dioxide. Dry powder. Foam. Water spray.</li><li>Do not use extinguishing media containing water.</li></ul>	
5.2. Special hazards arising from the substance or mixture		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Advice for firefighters		
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. 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 eq	uipment and emergency procedures	
6.1.1. For non-emergency personnel		
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".	
Emergency procedures	: Ventilate area.	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for containme	ent and cleaning up	
Methods for cleaning up	: Mechanically recover the product. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.	
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		
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour. Wear personal protective equipment.	
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2. Conditions for safe storage, includi	ng any incompatibilities	
Storage conditions	: Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated	

7.3. Specific end use(s)

No additional information available

place. Keep cool.

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#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

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



#### 8.2.2.1. Eye and face protection

#### Eye protection:

Chemical goggles or safety glasses

#### 8.2.2.2. Skin protection

Skin and body protection: Wear a mask

Hand protection: Protective gloves

8.2.2.3. Respiratory protection

**Respiratory protection:** Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

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
Colour	: Dark green to black.
Appearance	: Powder.
Molecular mass	: 256,32 g/mol

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Odour	· Odourless
Odour threshold	: Not available
Melting point	: 168 °C
Freezing point	: Not applicable
Boiling point	Not available
	• Non flammable
Flammability	
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 168 °C
рН	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Water: Insoluble
	Ethanol: Soluble
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

9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

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

Air contact. Direct sunlight. Moisture.

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: Toxicologica	information	
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008		
Acute toxicity (oral)	: Not classified	

EN (English)

Acute toxicity (dermal)

: Not classified

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Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
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
DITHIZONE AR (60-10-6)	
Viscosity, kinematic	Not applicable

#### 11.2. Information on other hazards

No additional information available

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)	: Not classified
Hazardous to the aquatic environment, long–term (chronic)	: 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 assessmen	t
No additional information available	
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** 

Waste treatment methods

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

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

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14.1. UN number or ID number			
Not regulated for transport			
14.2. UN proper shipping name			
Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID)	<ul> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> </ul>		
14.3. Transport hazard class(es)			
ADR Transport hazard class(es) (ADR)	: Not regulated		
IMDG Transport hazard class(es) (IMDG)	: Not regulated		
IATA Transport hazard class(es) (IATA)	: Not regulated		
ADN Transport hazard class(es) (ADN)	: Not regulated		
RID Transport hazard class(es) (RID)	: Not regulated		
14.4. Packing group			
Packing group (ADR) Packing group (IMDG) Packing group (IATA) Packing group (ADN) Packing group (RID)	<ul> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> </ul>		
14.5. Environmental hazards			
Dangerous for the environment Marine pollutant Other information	: No : No : No supplementary information available		
14.6. Special precautions for user			
Overland transport Not regulated			
Transport by sea Not regulated			
Air transport Not regulated			
Inland waterway transport Not regulated			
Rail transport Not regulated			

## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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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

**REACH Annex XVII (Restriction List)** 

No REACH Annex XVII restrictions

#### **REACH Annex XIV (Authorisation List)**

DITHIZONE AR is not on the REACH Annex XIV List

#### **REACH Candidate List (SVHC)**

DITHIZONE AR is not on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

DITHIZONE AR is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

#### **POP Regulation (Persistent Organic Pollutants)**

DITHIZONE AR is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### Ozone Regulation (1005/2009)

DITHIZONE is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

#### **Explosives Precursors Regulation (2019/1148)**

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 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 drug precursors)

#### 15.1.2. National regulations

#### Germany

Water hazard class (WGK) Hazardous Incident Ordinance (12. BImSchV)	<ul> <li>Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV).</li> <li>Is not subject of the Hazardous Incident Ordinance (12. BImSchV)</li> </ul>
Netherlands	
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
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

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Abbreviations and ac	Abbreviations and acronyms:		
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		
ΙΑΤΑ	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		
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		
РВТ	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 disrupting properties		

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H315	Causes skin irritation.
H319	Causes serious eye irritation.
Skin Irrit. 2	Skin corrosion/irritation, Category 2

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.