

SAFETY DATA SHEET

Revision Date 24-Dec-2021 Revision Number 4

1. Identification

Product Name 1,9-Dibromononane

Cat No.: AC112870000; AC112870050; AC112870100; AC112870250;

AC112870500

CAS No 4549-33-1

Synonyms Nonamethylene dibromide

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11

Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

2. Hazard(s) identification

Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS No	Weight %		
Nonane, 1,9-dibromo-	4549-33-1	97		

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Inhalation Remove from exposure, lie down. Remove to fresh air.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink

plenty of water. If possible drink milk afterwards.

Most important symptoms and

effects

No information available.

Notes to Physician

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical. Alcohol resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point $> 112 \, ^{\circ}\text{C} \, / > 233.6 \, ^{\circ}\text{F}$

Method - No information available

Autoignition Temperature

Explosion Limits

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen halides.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health	Flammability	Instability	Physical hazards
0	0	0	N/A

Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods for Containment and Clean Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

Up sawdust). Keep in suitable, closed containers for disposal. Sweep up and shovel into

suitable containers for disposal.

7. Handling and storage

Handling Avoid contact with skin and eyes. Avoid contact with skin and clothing. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Avoid breathing vapors or mists. Do not ingest. If swallowed then seek immediate medical assistance. Wash

thoroughly after handling.

Storage. Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible

Materials. Strong oxidizing agents. Oxidizing agent.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures None under normal use conditions.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory ProtectionNo protective equipment is needed under normal use conditions.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State Liquid
Appearance Clear
Odor Odorless

Odor Threshold No information available

pH No information available

Melting Point/Range No data available

Boiling Point/Range 285 - 288 °C / 545 - 550.4 °F @ 760 mmHg

Flash Point > 112 °C / > 233.6 °F Evaporation Rate No information available

Flammability (solid,gas)

Not applicable

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density 9.86 Specific Gravity 9.80

Solubility
No information available
Partition coefficient; n-octanol/water
No data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information available

Viscosity

No information available

Molecular Formula

C9 H18 Br2

Molecular FormulaC9 H18 BrMolecular Weight286.04

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents, Oxidizing agent

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors, Carbon

monoxide (CO), Carbon dioxide (CO2), Hydrogen halides

Hazardous Polymerization No information available.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Toxicologically Synergistic

Products

No acute toxicity information is available for this product

No information available

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Nonane, 1,9-dibromo-	4549-33-1	Not listed				

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental EffectsNo information available.

Teratogenicity No information available.

STOT - single exposure None known STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability

No information available

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDG/IMONot regulated

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags	
Nonane, 1,9-dibromo-	4549-33-1	X	ACTIVE	-	

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Nonane, 1,9-dibromo-	4549-33-1	-	Х	224-913-0	-	-		-	-	-

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Not applicable

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Regulations

U.S. Department of Transportation

Reportable Quantity (RQ): Ν **DOT Marine Pollutant** Ν **DOT Severe Marine Pollutant** Ν

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Nonane, 1,9-dibromo-	4549-33-1	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS No	, ,	Seveso III Directive (2012/18/EC) - Qualifying Quantities	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)

- Component	0,10,110	OUTUGO III DII GOLITO	001000 111 011001110	i tottoi aaiii	Bacci Commonicion
		(2012/18/EC) -	(2012/18/EC) -	Convention (PIC)	(Hazardous Waste)
		Qualifying Quantities	Qualifying Quantities		
		for Major Accident	for Safety Report		
		Notification	Requirements		
Nonane, 1,9-dibromo-	4549-33-1	Not applicable	Not applicable	Not applicable	Not applicable
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16. Other information

Regulatory Affairs **Prepared By**

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Revision Date 24-Dec-2021 24-Dec-2021 **Print Date**

Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS