

SAFETY DATA SHEET

Revision Date 05-September-2023 Revision Number 3

1. Identification

Product Name 2-Bromo-1-(1,3-thiazol-2-yl)ethanone

Cat No.: CC09505CB; CC09505DA; CC09505DE; CC09505ZZ

CAS-No 3292-77-1

Synonyms 2-(2-Bromoacetyl)thiazole

Recommended Use Laboratory chemicals.

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

Details of the supplier of the safety data sheet

Company

Importer/DistributorFisher ScientificFisher ScientificOne Reagent Lane112 Colonnade Road,Fair Lawn, NJ 07410

Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **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

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Acute oral toxicity

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Specific target organ toxicity (single exposure)

Category 1

Category 1

Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word

Danger

Hazard Statements

Harmful if swallowed

Causes severe skin burns and eye damage

May cause respiratory irritation



Precautionary Statements

Prevention

Do not breathe dust/fumes/gas/mist/vapours/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

IF INHALED: Remove person to fresh air and keep comfortable for breathing

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER/doctor

Rinse mouth

Do NOT induce vomiting

Wash contaminated clothing before reuse

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Light sensitive

3. Composition/Information on Ingredients

Component	CAS-No	Weight %	
2-Bromo-1-(1,3-thiazol-2-yl)ethanone	3292-77-1	>95	

4. First-aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

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

Immediate medical attention is required. Keep eye wide open while rinsing.

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

clothes and shoes. Call a physician immediately.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison

control center immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a

one-way valve or other proper respiratory medical device.

Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water.

Never give anything by mouth to an unconscious person.

Most important symptoms/effects Causes burns by all exposure routes. Product is a corrosive material. Use of gastric

lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue

and danger of perforation

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media CO₂, dry chemical, dry sand, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available 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

The product causes burns of eyes, skin and mucous membranes.

Hazardous Combustion Products

Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NOx). Sulfur oxides. Hydrogen bromide.

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
3	1	0	N/A

6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid

contact with skin, eyes or clothing.

Environmental Precautions Should not be released into the environment. Do not allow material to contaminate ground

water system.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Avoid dust formation. **Up**

7. Handling and storage							
Handling	Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.						
Storage.	Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.						
	To maintain product quality. Protect from moisture. Protect from light. Incompatible Materials. Strong oxidizing agents. Bases. Amines.						

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

Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Goggles

Hand Protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Glove material	Breakthrough time	Glove thickness	Glove comments
Nitrile rubber	See manufacturers	-	Splash protection only
Neoprene	recommendations		
Natural rubber			
PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly **Recommended Filter type:** Particulates filter conforming to EN 143

When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls

No information available.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State Solid
Appearance Yellow - Brown

Odor No information available
Odor Threshold No information available
pH No information available

Melting Point/Range52 - 55 °C / 125.6 - 131 °FBoiling Point/RangeNo information available

Flash Point

No information available
Evaporation Rate

Not applicable

Flammability (solid,gas)

No information available Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor PressureNo information availableVapor DensityNot applicableSpecific GravityNo information available

Specific GravityNo information availableSolubilityNo information availablePartition coefficient; n-octanol/waterNo data available

2-Bromo-1-(1,3-thiazol-2-yl)ethanone

Autoignition Temperature No information available **Decomposition Temperature** No information available

Viscosity Not applicable C5 H4 Br N O S **Molecular Formula Molecular Weight** 206.06

10. Stability and reactivity

None known, based on information available **Reactive Hazard**

Stability Stable under recommended storage conditions. Moisture sensitive. Light sensitive.

Conditions to Avoid Incompatible products. Excess heat. Exposure to moist air or water. Exposure to light.

Incompatible Materials Strong oxidizing agents, Bases, Amines

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

monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Sulfur oxides, Hydrogen

bromide

Hazardous Polymerization Hazardous polymerization does not occur.

None under normal processing. **Hazardous Reactions**

11. Toxicological information

Acute Toxicity

Product Information Component Information

Toxicologically Synergistic No information available

Products

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

No information available Irritation No information available

Sensitization

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
2-Bromo-1-(1,3-thiazol	3292-77-1	Not listed				
-2-vl)ethanone						

Mutagenic Effects No information available

Reproductive Effects No information available.

No information available. **Developmental Effects**

Teratogenicity No information available.

STOT - single exposure Respiratory system STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

delayed

Possible perforation of stomach or esophagus should be investigated: Ingestion causes

severe swelling, severe damage to the delicate tissue and danger of perforation

No information available **Endocrine Disruptor Information**

Other Adverse Effects

The toxicological properties have not been fully investigated.

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

DOT

UN-No UN3261

Proper Shipping NameCorrosive solid, acidic, organic, n.o.s.Technical Name2-Bromo-1-(1,3-thiazol-2-yl)ethanone

Hazard Class 8
Packing Group |||

TDG

UN-No UN3261

Proper Shipping Name Corrosive solid, acidic, organic, n.o.s.

Hazard Class 8
Packing Group |||

<u>IATA</u>

UN-No UN3261

Proper Shipping Name Corrosive solid, acidic, organic, n.o.s.

Hazard Class 8
Packing Group

IMDG/IMO

UN-No UN3261

Proper Shipping Name Corrosive solid, acidic, organic, n.o.s.

Hazard Class 8
Packing Group III

15. Regulatory information

International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
2-Bromo-1-(1,3-thiazol-2-yl)ethano ne	3292-77-1	1	ı	1	-	1	1	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
2-Bromo-1-(1,3-thiazol-2-yl)ethano	3292-77-1	-	-	-	-	X	-	-	-
ne									

Legend:

X - Listed '-' - Not Listed

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

Other International Regulations

Authorisation/Restrictions according to EU REACH

Not applicable

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)
2-Bromo-1-(1,3-thiazol-2-yl)et hanone	3292-77-1	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
2-Bromo-1-(1,3-thiazol-2-yl)et hanone	3292-77-1	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

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Revision Summary

This document has been updated to comply with the requirements of WHMIS 2015 to align

with the Globally Harmonised System (GHS) for the Classification and Labelling of

Chemicals.

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