

SAFETY DATA SHEET

GHS
United States

Section 1. Product and company identification

Product name	BUTYL NAMATE®	<u>In case of emergency</u>
Code	29506	1-203-853-1400
Supplier/Manufacturer	Vanderbilt Chemicals, LLC 30 Winfield Street Norwalk, CT 06855	Chemtrec: 1-800-424-9300 Outside US: +1-703-527-3887
Chemical name	Carbamodithioic acid, dibutyl-, sodium salt	
Synonym	Sodium dibutyldithiocarbamate.	
Material uses	Rubber accelerator.	
Product type	Liquid.	

Section 2. Hazards identification

OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 53% Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 53%

GHS label elements

Hazard pictograms



Signal word

Danger

Hazard statements

Harmful if swallowed.
Toxic in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause damage to organs through prolonged or repeated exposure. (bone marrow, cardiovascular system)

Precautionary statements

Prevention

Wear protective gloves. Wear protective clothing: Recommended: lab coat. Wear eye or face protection: Recommended: splash goggles. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Section 2. Hazards identification

Response	Immediately call a POISON CENTER or doctor. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	Not applicable.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	None known.

Section 3. Composition/information on ingredients

Substance/mixture Mixture

Ingredient name	CAS number	% by weight
water	7732-18-5	53
sodium dibutylcarbamodithioic acid	136-30-1	47

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in

Section 4. First aid measures

recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	Causes serious eye damage.
Inhalation	No known significant effects or critical hazards.
Skin contact	Causes severe burns. Toxic in contact with skin. May cause an allergic skin reaction.
Ingestion	Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact	Adverse symptoms may include the following: pain watering redness
Inhalation	No specific data.
Skin contact	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	Adverse symptoms may include the following: stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None known.

Specific hazards arising from the chemical

Hazardous thermal decomposition products	In a fire or if heated, a pressure increase will occur and the container may burst. Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides
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Section 5. Fire-fighting measures

Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Remark	Carbon disulfide will be released in acid media, or in buffered systems below pH 8. In a closed system, complete decomposition could produce carbon disulfide concentrations at or above the lower explosion limit.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.
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Section 7. Handling and storage

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Product may crystallize below freezing temperature. To dissolve, stir and warm to 60°F.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. Recommended: splash goggles

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat

Section 8. Exposure controls/personal protection

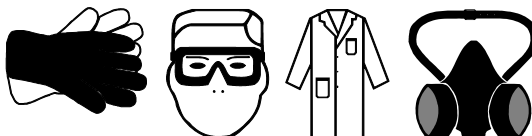
Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Vapor and dust respirator.

Personal protective equipment (Pictograms)



Section 9. Physical and chemical properties

Appearance

Physical state	Liquid.
Color	Amber. [Light]
Odor	Mild
Odor threshold	Not available.
pH	13.1 to 14.1
Melting point	Not available.
Boiling point	Not available.
Flash point	[Product does not sustain combustion.]
Burning time	Not applicable.
Burning rate	Not applicable.
Evaporation rate	Not available.
Flammability (solid, gas)	Carbon disulfide will be released in acid media, or in buffered systems below pH 8. In a closed system, complete decomposition could produce carbon disulfide concentrations at or above the lower explosion limit.
Lower and upper explosive (flammable) limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Density	1.09 g/cm ³
Relative density	1.09
Solubility	Easily soluble in the following materials: methanol and acetone. Soluble in the following materials: cold water. Very slightly soluble in the following materials: diethyl ether. Insoluble in the following materials: n-octanol.
Solubility in water	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
SADT	Not available.
Viscosity	Not available.

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	No specific data.
Incompatible materials	Reactive or incompatible with the following materials: acids
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
sodium dibutylcarbamodithioic acid	LD50 Dermal	Rat	200 to 1000 mg/kg	-
	LD50 Oral	Rat	650 to 1400 mg/kg	-

Irritation/Corrosion

Not available.

Conclusion/Summary

Skin

Product is considered to be corrosive to the skin based on alkalinity and pH.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
sodium dibutylcarbamodithioic acid	skin	Mouse	Sensitizing

Mutagenicity

Product/ingredient name	Test	Experiment	Result
sodium dibutylcarbamodithioic acid	-	Subject: Bacteria	Negative

Carcinogenicity

Not available.

Section 11. Toxicological information

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
sodium dibutylcarbamodithioic acid	Category 2	-	bone marrow, cardiovascular system

Aspiration hazard

Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact

Causes serious eye damage.

Inhalation

No known significant effects or critical hazards.

Skin contact

Causes severe burns. Toxic in contact with skin. May cause an allergic skin reaction.

Ingestion

Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

Adverse symptoms may include the following:
pain
watering
redness

Inhalation

No specific data.

Skin contact

Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion

Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects

Not available.

Potential delayed effects

Not available.

Section 11. Toxicological information

Long term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Potential chronic health effects

Not available.

General May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity No known significant effects or critical hazards.

Mutagenicity No known significant effects or critical hazards.

Teratogenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	500 mg/kg
Dermal	300 mg/kg

Other information Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
sodium dibutylcarbamodithioic acid	Acute EC50 1.4 mg/l Based on tests of similar materials	Algae	96 hours
	Acute EC50 0.91 mg/l Based on tests of similar materials	Daphnia	48 hours
	Acute LC50 211 mg/l	Fish	96 hours
	Chronic LC50 1 mg/l	Fish	11 days

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
sodium dibutylcarbamodithioic acid	OECD 301D	>67.4 % - Readily - 28 days (Based on tests of similar materials)	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
sodium dibutylcarbamodithioic acid	-	-	Readily

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
sodium dibutylcarbamodithioic acid	-0.2	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) Not available.

Other adverse effects No known significant effects or critical hazards.




Section 13. Disposal considerations

Disposal methods













The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN2922	CORROSIVE LIQUID, TOXIC, N.O.S. (sodium dibutyldithiocarbamate solution, sodium hydroxide)	8 (6.1)	III	  	Remarks Marine pollutant

Section 14. Transport information

TDG Classification	UN2922	CORROSIVE LIQUID, TOXIC, N.O.S. (sodium dibutyldithiocarbamate solution, sodium hydroxide)	8 (6.1)	III	  	Remarks Marine pollutant
ADR/RID Class	UN2922	CORROSIVE LIQUID, TOXIC, N.O.S. (sodium dibutyldithiocarbamate solution, sodium hydroxide)	8 (6.1)	III	  	Remarks Marine pollutant
IMDG Class	UN2922	CORROSIVE LIQUID, TOXIC, N.O.S. (sodium dibutyldithiocarbamate solution, sodium hydroxide)	8 (6.1)	III	  	Remarks Marine pollutant
IATA-DGR Class	UN2922	CORROSIVE LIQUID, TOXIC, N.O.S. (sodium dibutyldithiocarbamate solution, sodium hydroxide)	8 (6.1)	III	  	Remarks Marine pollutant

PG* : Packing group

Section 15. Regulatory information

[United States inventory \(TSCA 8b\)](#) All components are active or exempted.

[U.S. Federal regulations](#)

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

[SARA 302/304](#)

Section 15. Regulatory information

Composition/information on ingredients

No products were found.

SARA 304 RQ

Not applicable.

SARA 311/312

Classification

ACUTE TOXICITY (oral) - Category 4
 ACUTE TOXICITY (dermal) - Category 3
 SKIN CORROSION - Category 1C
 SERIOUS EYE DAMAGE - Category 1
 SKIN SENSITIZATION - Category 1
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Composition/information on ingredients

Name	%	Classification
sodium dibutylcarbamodithioic acid	47	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

State regulations

Massachusetts

None of the components are listed.

New York

None of the components are listed.

New Jersey

None of the components are listed.

Pennsylvania

None of the components are listed.

California Prop. 65

None of the components are listed.

International regulations

Australia inventory (AICS)

All components are listed or exempted.

Canada inventory

All components are listed or exempted.

China inventory (IECSC)

All components are listed or exempted.

Europe inventory

All components are listed or exempted.

Japan inventory (ENCS)

All components are listed or exempted.

Korea inventory (KECI)

All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC)

All components are listed or exempted.

Philippines inventory (PICCS)

All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI)

All components are listed or exempted.

Section 16. Other information

Hazardous Material Identification System (U.S.A.)

Health	3
Flammability	1
Physical hazards	0

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The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



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History

Date of printing	1/6/2021
Validation date	1/6/2021
Date of previous issue	1/6/2021
Version	6

Key to abbreviations

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References

Not available.

Information contact

Vanderbilt Global Services, LLC
Corporate Risk Management
1-203-295-2143

Visit www.vanderbiltchemicals.com for more information.

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Section 16. Other information