CHEMTRADE

Sodium Nitrite, High Purity Grades and ACS

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Version: 4.0

Date of Issue: 05/05/2015 Revision Date: 09/24/2018

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Sodium Nitrite, High Purity Grades And ACS

Synonyms: Sodium Nitrite, High Purity Grades and ACS, Sodium Nitrate, High Purity Flake; Sodium Nitrate, High Purity Granular;

Sodium Nitrate, High Purity Special Intended Use of the Product

Curing salt formulations. Chemical and dye source of nitrous acid. Corrosion inhibitor in antifreeze, paints, oil tanks and pipelines. Oxidizing agent and depolarizer in detinning. Phosphate coatings. Gold plating baths. Heat transfer salt. Polymer inhibitor for synthetic rubber. Nitrous acid source for accelerators, retarders and antioxidants / antiozonants. Foam rubber blowing agent. Wastewater treatment odor control and bacteria activity inhibitor.

Name, Address, and Telephone of the Responsible Party

Manufacturer

CHEMTRADE LOGISTICS INC. 155 Gordon Baker Road Suite 300

Toronto, Ontario M2H 3N5 For SDS Info: (416) 496-5856 www.chemtradelogistics.com

Emergency Telephone Number

Emergency Number Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300

INTERNATIONAL: +1-703-741-5970

Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC - Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification

Hazard Pictograms

Ox. Sol. 2 H272 Acute Tox. 3 (Oral) H301 Eye Irrit. 2A H319 Aquatic Acute 1 H400 Full text of hazard classes and H-statements: see section 16

Label Elements GHS Labeling









Signal Word : Danger

Hazard Statements : H272 - May intensify fire; oxidizer.

H301 - Toxic if swallowed.

H319 - Causes serious eve irritation. H400 - Very toxic to aquatic life.

Precautionary Statements : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P220 - Keep away from clothing and other combustible materials.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, and eye protection. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

09/24/2018 EN (English US) SDS#: CHF-2020S 1/10

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

contact lenses, if present and easy to do. Continue rinsing.

P321 - Specific treatment (see section 4 on this SDS).

P330 - Rinse mouth.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish.

P391 - Collect spillage.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Exposure of nitrites via ingestion that result in endogenous nitrosation are classified by IARC as a Group 2A - probable human carcinogen. This product is not anticipated to be available for oral exposure which would result in endogenous nitrosation under normal conditions of use or foreseeable emergencies, and is therefore not classified as a carcinogen. Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and, possibly shock.

Unknown acute toxicity

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% *	GHS Ingredient Classification		
Sodium nitrite	(CAS-No.) 7632-00-0	> 99.0	Ox. Sol. 2, H272		
			Acute Tox. 3 (Oral), H301		
			Eye Irrit. 2A, H319		
			Aquatic Acute 1, H400		
Sodium nitrate	(CAS-No.) 7631-99-4	< 0.5	Ox. Sol. 3, H272		
			Eye Irrit. 2A, H319		
Water	(CAS-No.) 7732-18-5	< 0.3	Not classified		
Disodium carbonate	(CAS-No.) 497-19-8	< 0.2	Eye Irrit. 2A, H319		

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Get medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor.

Most Important Symptoms and Effects both Acute and Delayed

General: Causes serious eye irritation. Toxic if swallowed.

Inhalation: Prolonged exposure may cause irritation. Respirable dust may be absorbed through the bloodstream and have adverse effects.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: Causes serious eye irritation. Contact causes severe irritation with redness and swelling of the conjunctiva.

09/24/2018 EN (English US) SD\$#: CHE-2020S 2/10

^{*}Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Ingestion: This material is toxic in small amounts orally, and can cause adverse health effects or death. Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. If ingested, nitrates may be reduced to nitrites by bacteria in the digestive tract. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and, possibly shock.

Chronic Symptoms: None known.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand. Causes methemoglobinemia – emergency response should treat appropriately, such as by intravenous administration of methylene blue. Depending on the degree of exposure, periodic medical examination may be indicated.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog (flooding amounts).

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire. Any extinguishing media other than water may be ineffective, as this product is its own oxygen source.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: May cause fire or explosion; strong oxidizer.

Explosion Hazard: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Reactivity: Oxidizer: increases the burning rate of combustible materials. The substance is a strong oxidant and reacts with combustible and reducing materials.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. Do not breathe fumes from fires or vapors from decomposition. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products**: Thermal decomposition for sodium nitrite occurs at > 320 °C (> 608 °F) releasing nitrogen monoxide, nitrogen dioxide, disodium oxide.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid breathing dust. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Keep away from combustible material. Avoid all contact with skin, eyes, or clothing.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Eliminate ignition sources. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Use only non-sparking tools.

09/24/2018 EN (English US) SD\$#: CHE-2020S 3/10

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Do not take up in combustible material such as: saw dust or cellulosic material. Avoid actions that cause dust to become airborne during clean-up such as dry sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean-up dust. Use PPE described in Section 8. Contact competent authorities after a spill. Transfer spilled material to a suitable container for disposal.

Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Keep away from heat, sparks, open flames, hot surfaces, combustible materials, incompatible materials. - No smoking. Handle empty containers with care because they may still present a hazard.

Additional Hazards When Processed: May cause or intensify fire; oxidizer.

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

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed. Avoid creating or spreading dust.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from extremely high or low temperatures and incompatible materials. Keep in fireproof place. Store locked up.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Reducing agents. Water, humidity. Aluminum. Ammonia. Amines. Powdered metals. Cyanides. Combustible materials. Ammonium salts.

Specific End Use(s)

Curing salt formulations. Chemical and dye source of nitrous acid. Corrosion inhibitor in antifreeze, paints, oil tanks and pipelines. Oxidizing agent and depolarizer in detinning. Phosphate coatings. Gold plating baths. Heat transfer salt. Polymer inhibitor for synthetic rubber. Nitrous acid source for accelerators, retarders and antioxidants / antiozonants. Foam rubber blowing agent. Wastewater treatment odor control and bacteria activity inhibitor.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Gas detectors should be used when flammable gases or vapors may be released. Avoid creating or spreading dust. Proper grounding procedures to avoid static electricity should be followed. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.









Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves. **Eye Protection:** Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Environmental Exposure Controls: Avoid release to the environment.

Other Information: When using, do not eat, drink or smoke.

09/24/2018 EN (English US) SDS#: CHE-2020S 4/10

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Solid

Appearance : Pale straw-colored

Odor : Odorless
Odor Threshold : Not available
Ph : Not available
Evaporation Rate : Not available
Melting Point : 271.1 °C (519.98 °F)

Freezing Point Not available **Boiling Point** Not available **Flash Point** Not available Not available **Auto-ignition Temperature Decomposition Temperature** Not available Flammability (solid, gas) Not available **Lower Flammable Limit** Not available Not available **Upper Flammable Limit** Not available **Vapor Pressure** Relative Vapor Density at 20°C Not available

Solubility : Not available Partition Coefficient: N-Octanol/Water : Not available Viscosity : Not available

SECTION 10: STABILITY AND REACTIVITY

<u>Reactivity</u>: Oxidizer: increases the burning rate of combustible materials. The substance is a strong oxidant and reacts with combustible and reducing materials.

Not available

2.168

Chemical Stability: May cause fire or explosion; strong oxidizer.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

<u>Conditions to Avoid</u>: Extremely high or low temperatures and incompatible materials. Sparks, heat, open flame, combustible materials, organic material and other sources of ignition.

<u>Incompatible Materials</u>: Strong acids, strong bases, strong oxidizers. Reducing agents. Water, humidity. Aluminum. Ammonia. amines. Powdered metals. Cyanides. Combustible materials. Ammonium salts.

Hazardous Decomposition Products: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Oral: Toxic if swallowed.
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data:

Relative Density Specific Gravity

Sodium Nitrite, Free-Flowing Grades

ATE (Oral) 86.29 mg/kg body weight

Skin Corrosion/Irritation: Not classified

Eye Damage/Irritation: Causes serious eye irritation. **Respiratory or Skin Sensitization:** Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

09/24/2018 EN (English US) SDS#: CHE-2020S 5/10

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Effects After Inhalation: Prolonged exposure may cause irritation. Respirable dust may be absorbed through the bloodstream and have adverse effects.

Symptoms/Effects After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Effects After Eye Contact: Causes serious eye irritation. Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Effects After Ingestion: This material is toxic in small amounts orally, and can cause adverse health effects or death. . Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. If ingested, nitrates may be reduced to nitrites by bacteria in the digestive tract. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and, possibly shock.

Chronic Symptoms: None known.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium nitrite (7632-00-0)	
LD50 Oral Rat	85 mg/kg
LC50 Inhalation Rat	5.5 mg/l/4h
Sodium nitrate (7631-99-4)	
LD50 Oral Rat	> 2000 mg/kg
Disodium carbonate (497-19-8)	
LD50 Oral Rat	4090 mg/kg
LC50 Inhalation Rat	2300 mg/m³ (Exposure time: 2 h)

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Very toxic to aquatic life.

Sodium nitrite (7632-00-0)	
LC50 Fish 1	0.19 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
LC50 Fish 2	0.092 - 0.13 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
Sodium nitrate (7631-99-4)	
LC50 Fish 1	2000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC50 Fish 2	994.4 - 1107 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
Disodium carbonate (497-19-8)	
LC50 Fish 1	300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	265 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	310 - 1220 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

Persistence and Degradability

Sodium Nitrite, High Purity Grades And ACS				
Persistence and Degradability Not established.				
Sodium nitrate (7631-99-4)				
Persistence and Degradability Readily biodegradable in water.				

Bioaccumulative Potential

Sodium Nitrite, High Purity Grades And ACS					
Bioaccumulative Potential	Not established.				
Sodium nitrite (7632-00-0)	Sodium nitrite (7632-00-0)				
.og Pow -3.7 (at 25 °C)					
Sodium nitrate (7631-99-4)					
Log Pow	-3.8 (at 25 °C)				
Bioaccumulative Potential Not expected to bioaccumulate.					

09/24/2018 EN (English US) SDS#: CHE-2020S 6/10

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Disodium carbonate (497-19-8)	
BCF Fish 1	(no bioaccumulation)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

*When shipped in accordance with US DOT 49 CFR part 171.4(c) and other appropriate sections/provisions this material is not designated as a marine pollutant when transported by road or rail.

**When shipped in accordance with the Canada Transport of Dangerous Goods Regulations part 1.45.1 and other appropriate sections/provisions this material is not designated as a marine pollutant when transported by road or rail

TRANSPORTATION	DOT	TDG	IMDG	IATA	
CLASSIFICATION					
Identification Number	UN1500	UN1500	UN1500	UN1500	
Proper Shipping Name	SODIUM NITRITE	SODIUM NITRITE	SODIUM NITRITE	SODIUM NITRITE	
Transport Hazard	5.1 (6.1)	5.1 (6.1)	5.1 (6.1)	5.1 (6.1)	
Class(es)					
	OXIDIZER POISON	5.1	5.1	5.1	
Packing Group			III	6	
Environmental Hazards	Marine Pollutant : Yes*	Marine Pollutant :	Marine Pollutant : Yes	Marine Pollutant:	
Environmental nazarus	iviainie Poliutant : Yes	Yes**	ivialille Pollutalit : Yes	N/A	
Emergency Response	ERG Number: 140	ERAP Index: Not	EMS: F-A, S-Q	ERG code (IATA):	
		applicable		5P	
Additional Information	Not applicable	Not applicable	Not applicable	Not applicable	

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Chemical Name (CAS No.)	CERCLA RQ	EPCRA 304 RQ	SARA 302 TPQ	SARA 313	
Sodium nitrite (7632-00-0)	100 lb	Not applicable	Not applicable	Yes	
Sodium nitrate (7631-99-4)	Not applicable	Not applicable	Not applicable	No	
Disodium carbonate (497-19-8)	Not applicable	Not applicable	Not applicable	No	

SARA 311/312

Sodium Nitrite, High Purity Grades And ACS	
Fire hazard. Immediate (acute) health hazard	

US TSCA Flags

Chemical Name (CAS No.)	US TSCA Flags/ Other Information
Sodium nitrite (7632-00-0)	S - S - indicates a substance that is identified in a proposed or final Significant New Uses Rule.

US State Regulations

09/24/2018 EN (English US) SD\$#: CHE-2020S 7/10

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

California Proposition 65

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity		
Sodium nitrite (7632-00-0)	No	No	No	No
Sodium nitrate (7631-99-4)	No	No	No	No
Disodium carbonate (497-19-8)	No	No	No	No

State Right-To-Know Lists

Sodium nitrite (7632-00-0)

- U.S. Massachusetts Right To Know List Yes
- U.S. New Jersey Right to Know Hazardous Substance List Yes
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List Yes
- U.S. Pennsylvania RTK (Right to Know) Special Hazardous Substances No
- U.S. Pennsylvania RTK (Right to Know) List Yes

Sodium nitrate (7631-99-4)

- U.S. Massachusetts Right To Know List Yes
- U.S. New Jersey Right to Know Hazardous Substance List No
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List No
- U.S. Pennsylvania RTK (Right to Know) Special Hazardous Substances No
- U.S. Pennsylvania RTK (Right to Know) List Yes

Disodium carbonate (497-19-8)

- U.S. Massachusetts Right To Know List No
- U.S. New Jersey Right to Know Hazardous Substance List No
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List No
- U.S. Pennsylvania RTK (Right to Know) Special Hazardous Substances No
- U.S. Pennsylvania RTK (Right to Know) List No

N-[2-(1-methylpyrrol-2-yl)-3H-benzimidazol-5-yl]furan-2-carboxamide (977052-10-0)

- U.S. Massachusetts Right To Know List No
- U.S. New Jersey Right to Know Hazardous Substance List No
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List No
- U.S. Pennsylvania RTK (Right to Know) Special Hazardous Substances No
- U.S. Pennsylvania RTK (Right to Know) List No

Canadian Regulations

Sodium nitrite (7632-00-0)

Listed on the Canadian DSL (Domestic Substances List)

Not listed on the Canadian NDSL (Non-Domestic Substances List)

Sodium nitrate (7631-99-4)

Listed on the Canadian DSL (Domestic Substances List)

Not listed on the Canadian NDSL (Non-Domestic Substances List)

Disodium carbonate (497-19-8)

Listed on the Canadian DSL (Domestic Substances List)

Not listed on the Canadian NDSL (Non-Domestic Substances List)

International Inventories/Lists

Chemical Name (CAS No.)	Australia	Turkey	Korea	EU	EU	EU	EU	Mexico
	AICS	CICR	ECL	EINECS	ELINCS	SVHC	NLP	INSQ
Sodium nitrite (7632-00-0)	Yes	Yes	Yes	Yes	No	No	No	Yes
Sodium nitrate (7631-99-4)	Yes	Yes	Yes	Yes	No	No	No	Yes
Disodium carbonate (497-19-8)	Yes	Yes	Yes	Yes	No	No	No	Yes

09/24/2018 EN (English US) SDS#: CHE-2020S 8/10

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Chemical Name (CAS No.)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCL	Japan PRTR	Philippines PICCS	New Zealand NZIOC	US TSCA
Sodium nitrite (7632-00-0)	Yes	Yes	No	Yes	No	Yes	Yes	Yes
Sodium nitrate (7631-99-4)	Yes	Yes	No	No	No	Yes	Yes	Yes
Disodium carbonate (497-19-8)	Yes	Yes	Yes	No	No	Yes	Yes	Yes

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 06/09/2017

Revision Summary

Section	Change	Date Changed
3	Ingredient modification	09/24/2018
16	NFPA and HMIS update	09/24/2018

Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

GHS Full Text Phrases:

Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3		
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1		
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A		
Ox. Sol. 2	Oxidizing solids Category 2		
Ox. Sol. 3	Oxidizing solids Category 3		
H272	May intensify fire; oxidizer		
H301	Toxic if swallowed		
H319	Causes serious eye irritation		
H400	Very toxic to aquatic life		

NFPA 704

NFPA Health Hazard : 3 - Materials that, under emergency conditions, can cause

serious or permanent injury.

NFPA Fire Hazard : 0 - Materials that will not burn under typical dire

conditions, including intrinsically noncombustible materials

such as concrete, stone, and sand.

NFPA Reactivity Hazard : 1 - Materials that in themselves are normally stable but can

become unstable at elevated temperatures and pressures.

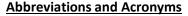
NFPA Specific Hazards : OX - Materials that posses oxidizing properties.

HMIS Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

Flammability : 0 Minimal Hazard **Physical** : 1 Slight Hazard **PPE** See Section 8



Liability Act - Reportable Quantity

LC50 - Median Lethal Concentration AICS – Australian Inventory of Chemical Substances

ACGIH - American Conference of Governmental Industrial Hygienists LD50 - Median Lethal Dose

AIHA - American Industrial Hygiene Association LOAEL - Lowest Observed Adverse Effect Level ATE - Acute Toxicity Estimate LOEC - Lowest-observed-effect Concentration BCF - Bioconcentration factor Log Pow - Octanol/water Partition Coefficient

NFPA 704 - National Fire Protection Association - Standard System for the BEI - Biological Exposure Indices (BEI) CAS No. - Chemical Abstracts Service number Identification of the Hazards of Materials for Emergency Response

CERCLA RQ - Comprehensive Environmental Response, Compensation, and NIOSH - National Institute for Occupational Safety and Health

> NLP - Europe No Longer Polymers List NOAEL - No-Observed Adverse Effect Level

CICR - Turkish Inventory and Control of Chemicals

DOT - 49 CFR - US Department of Transportation - Code of Federal NOEC - No-Observed Effect Concentration

09/24/2018 EN (English US) SDS#: CHE-2020S 9/10

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Regulations Title 49 – Transportation. EC50 - Median effective concentration

ECL - Korea Existing Chemicals List

EINECS - European Inventory of Existing Commercial Chemical Substances

ELINCS - European List of Notified Chemical Substances EmS - IMDG Emergency Schedule Fire & Spillage

ENCS - Japanese Existing and New Chemical Substances Inventory

EPA – Environmental Protection Agency

EPCRA 304 RQ – EPCRA 304 Extremely Hazardous Substance Emergency Planning and Community Right-to-Know-Act – Reportable Quantity ERAP Index – Emergency Response Assistance Plan Quantity Limit

FrC50 - FC50 in Terms of Reduction Growth Rate

 ${\sf ERG\ code\ (IATA)-Emergency\ Response\ Drill\ Code\ as\ found\ in\ the\ International}$

Civil Aviation Organization (ICAO)

ERG No. - Emergency Response Guide Number HCCL - Hazard Communication Carcinogen List HMIS — Hazardous Materials Information System IARC - International Agency for Research on Cancer

IATA - International Air Transport Association – Dangerous Goods Regulations

IDLH - Immediately Dangerous to Life or Health

IECSC - Inventory of Existing Chemical Substances Produced or Imported in

China

IMDG - International Maritime Dangerous Goods Code INSQ - Mexican National Inventory of Chemical Substances

ISHL - Japan Industrial Safety and Health Law

NZIOC - New Zealand Inventory of Chemicals

OEL - Occupational Exposure Limits

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limits

PICCS - Philippine Inventory of Chemicals and Chemical Substances PDSCL - Japan Poisonous and Deleterious Substances Control Law

PPE - Personal Protective Equipment

PRTR - Japan Pollutant Release and Transfer Register

REL - Recommended Exposure Limit

SADT - Self Accelerating Decomposition Temperature SARA - Superfund Amendments and Reauthorization Act

SARA 302 - Section 302, 40 CFR Part 355

SARA 311/312 - Sections 311 and 312, 40 CFR Part 370 Hazard Categories

SARA 313 - Section 313, 40 CFR Part 372 SRCL - Specifically Regulated Carcinogen List

STEL - Short Term Exposure Limit

SVHC – European Candidate List of Substance of Very High Concern TDG – Transport Canada Transport of Dangerous Goods Regulations

TLM - Median Tolerance Limit TLV - Threshold Limit Value TPQ - Threshold Planning Quantity

TSCA – United StatesToxic Substances Control Act

TWA - Time Weighted Average

WEEL - Workplace Environmental Exposure Levels

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.



Chemtrade NA GHS SDS 2015

09/24/2018 EN (English US) SD\$#: CHE-2020S 10/10