



SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

Section 1: Product and Company Identification

Product Name:	KCI Chemical Sharpener for Tungsten Points
Product Identifier:	Chemical Sharpener for Tungsten Points
Product Use:	Chemically sharpens tungsten electrodes
Item Code(s):	RW900005
SDS Code:	007
Manufacturer:	KCI, Inc.
Physical Address:	1721 Toal Street Charlotte, N.C. 28206
Mailing Address:	P.O. Box 26614 Charlotte, N.C. 28221
Business Phone:	704-372-8435
Business Fax:	704-333-5955
E-mail Address:	info@kciincorporated.com
Web Address:	www.kciincorporated.com
Emergency Phone:	CHEMTREC (24-Hour) 1-800-424-9300
Date of Preparation:	November 5, 2014 (Revised September 26, 2018)
OSHA Regulatory Status:	Hazardous
WHMIS Classification:	C, D1B, D2B

Section 2: Hazard Identification

EMERGENCY OVERVIEW

WHITE TO SLIGHTLY YELLOW CRYSTALLINE SOLID. TOXIC IF SWALLOWED OR DUST IS INHALED. OXIDIZER: MAY IGNITE ORGANIC MATERIALS AND REACT WITH OTHER MATERIALS. CAN DECOMPOSE IF MIXED WITH ACIDS OR EXPOSED TO FIRE CONDITIONS, RELEASING TOXIC NITROGEN OXIDES.

OSHA STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Potential Health Affects

SKIN: May cause skin irritation.

EYES: May strongly irritate or burn the eyes.

INHALATION: Product mists may cause irritation to the respiratory tract.

INGESTION: May irritate the gastrointestinal tract. Although small quantities are used in food preparation, swallowing moderate amounts of sodium nitrite can result in serious toxic effects including death. Effects include nausea, weakness, cyanosis (blue skin), collapse and coma, possibly leading to death. Sodium nitrite interferes with the blood's ability to transport oxygen.

DELAYED EFFECTS: None known. If sodium nitrite is used with amines found in certain cutting fluids, potentially carcinogenic nitrosamine compounds may be formed.



Section 3: Composition and Information on Ingredients

Component	CAS-No	Weight %
Sodium Nitrite	7632-00-0	>98%

Section 4: First Aid Measures

EYE CONTACT: Immediately flush eyes with water for at least 15 minutes. Get medical attention if irritation persists.

SKIN CONTACT: Flush with plenty of water, removing contaminated clothing. If irritation develops, get medical attention.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get prompt medical attention.

INGESTION: Do not induce vomiting. Immediately give large quantities of water. Get medical attention immediately.

NOTES TO PHYSICIAN: Sodium nitrite forms methemoglobin in the blood stream. Treat accordingly.

Section 5: Fire Fighting Measures

Flammable Properties

FLASH POINT: Not Flammable

FLASH POINT METHOD: Not Applicable

AUTOIGNITION TEMPERATURE: Not Applicable

UPPER FLAME LIMIT (VOLUME % IN AIR): Not Applicable

LOWER FLAME LIMIT (VOLUME % IN AIR): Not Applicable

FLAME PROPAGATION RATE (SOLIDS): Not Applicable

OSHA FLAMMABILITY CLASS: Not Applicable

SUITABLE EXTINGUISHING MEDIA: Use flooding amounts of water or other agents.

UNSUITABLE EXTINGUISHING MEDIA: Do not use dry chemicals containing ammonium phosphate.

Explosion Limits

HAZARDOUS COMBUSTION PRODUCTS: No information available

IMPACT SENSITIVITY: No information available

SENSITIVITY TO STATIC DISCHARGE: No information available

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Material does not burn but is an oxidizing agent and will support combustion of other materials. Product decomposes above 608°F releasing toxic nitrogen oxides.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS: Wear self-contained breathing apparatus (SCBA) and full protective equipment.

Section 6: Accidental Release Measures

IN CASE OF SPILL OR OTHER RELEASE: Remove sources of ignition. Ventilate area. Use non-sparking tools and equipment. Sweep or shovel spilled material into containers. Dispose of material according to local, state, and federal authorities. Do not allow product or residues to enter waterways and/or any source of drinking water.

Section 7: Handling and Storage

HANDLING: Avoid contact with skin and eyes. Do not breathe product dusts. Avoid contact with incompatible, combustible, organic or readily oxidizable materials.

STORAGE: Store in a cool, dry, well-ventilated area. Keep containers tightly closed. Do not store on wooden floors. Isolate from combustible materials. Empty containers may contain product residues; observe all warnings and precautions listed for the product.

Section 8: Exposure Controls / Personal Protection

Component	ACGIH TLV	OSHA PEL	Ontario TWAEV	Mexico OEL (TWA)	NIOSH IDLH
Sodium Nitrite				TWA: 2 mg/m ³	

ENGINEERING MEASURES: Use local exhaust to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

EYE/FACE PROTECTION: Wear chemical safety goggles. Do not wear contact lenses.

SKIN PROTECTION: Wear appropriate personal protective clothing to prevent skin contact. If prolonged or repeated contact is anticipated, all clothing should be impervious to liquid.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

GENERAL HYGIENE CONSIDERATIONS: To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29 CFR 1910.132) be conducted before using this product. Eyewash and safety showers are recommended.

Section 9: Physical and Chemical Properties

APPEARANCE:	Crystals
COLOR:	White to slightly yellow
CHEMICAL FORMULA:	NaNO ₂
ODOR:	None
ODOR THRESHOLD:	No information available
PHYSICAL STATE:	Solid
pH:	~ 9.0 (for aqueous solution)
FLASH POINT:	Not flammable
AUTOIGNITION TEMPERATURE:	Not applicable
BOILING POINT/RANGE:	Decomposes above 608°F
MELTING POINT/RANGE:	520°F
FLAMMABILITY LIMITS IN AIR:	No information available
EXPLOSIVE PROPERTIES:	No information available
OXIDIZING PROPERTIES:	No information available
EVAPORATION RATE:	Not determined
VAPOR PRESSURE:	Not applicable
VAPOR DENSITY:	Not applicable
SPECIFIC GRAVITY:	2.17
PARTITION COEFFICIENT (N-OCTANOL/WATER):	No information available
VISCOSITY:	No information available
MOLECULAR WEIGHT:	69.0
WATER SOLUBILITY:	80.8 g/100 g at 68°F
VOC CONTENT (%):	0

Section 10: Stability and Reactivity

CHEMICAL STABILITY: Normally stable.

CONDITIONS TO AVOID: Material slowly oxides to sodium nitrite when exposed to air. Avoid heat, flame, ignition sources, shock, friction and incompatibilities.

INCOMPATIBLE PRODUCTS: Hazardous reactions can occur with acids, ammonium compounds, reducing agents (particularly cyanides, thiocyanates and thiosulfates). May ignite organic compounds and other combustible materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen (toxic and irritating).

POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur.

Section 11: Toxicological Information

Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
SODIUM NITRITE	88 mg/kg (rat)		5.5 mg/m ³ /4hr (rat)

IRRITATION: No information available

CORROSIVITY: No information available

SENSITIZATION: No information available

Chronic Toxicity

CARCINOGENICITY: There are no known carcinogenic chemicals in this product.

MUTAGENIC EFFECTS: No information available

REPRODUCTIVE EFFECTS: No information available

DEVELOPMENTAL EFFECTS: No information available

TERATOGENICITY: Multiple reproductive tests indicate that sodium nitrite is not teratogenic.

TARGET ORGAN EFFECTS: No information available

OTHER ADVERSE EFFECTS: Fetal toxicity has been demonstrated in pregnant animals fed toxic doses of sodium nitrite. This is due to the formation of methemoglobin.

ENDOCRINE DISRUPTOR INFORMATION: No information available

Section 12: Ecological Information

Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Component	Freshwater Algae	Freshwater Fish	Microtex	Water Flea
Sodium Nitrite		LC50 = 0.19 mg/L Oncorhynchus mykiss 96 h		

PERSISTENCE AND DEGRADABILITY: No information available

BIOACCUMULATION: No information available

MOBILITY IN ENVIRONMENTAL MEDIA: No information available

Component	Log Pow
SODIUM NITRITE 7632-00-0	-3.7

Section 13: Disposal Considerations

WASTE DISPOSAL METHODS: Dispose of waste in accordance with all federal, state and local regulations.

CONTAMINATED PACKAGING: Empty containers should be taken for local recycling, recovery or waste disposal.

Section 14: Transportation Information

DOT Regulated
PROPER SHIPPING NAME: Sodium Nitrite
HAZARD CLASS: 5.1
SUBSIDIARY HAZARD CLASS: 6.1
UN-No: UN1500
PACKAGING GROUP: PGIII

TDG Regulated
HAZARD CLASS: 5.1
SUBSIDIARY HAZARD CLASS: 6.1
UN-No: UN1500
PACKAGING GROUP: PGIII

IMDG Product is a marine pollutant if shipped overseas.

Section 15: Regulatory Information

International Inventories

Component	TSCA	DSL	ELINCS	EINECS	ENCS	CHINA	KECL	PICCS	AICS
SODIUM NITRITE	YES	YES	NO	YES	YES	YES	YES	YES	YES

Legend:

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

DSL - Canadian Domestic Substances List

EINECS - European Inventory of Existing Commercial Chemical Substances

ELINCS - EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
SODIUM NITRITE	7632-00-0	>98	1.0

SARA 311/312 Hazardous Categorization

CHRONIC HEALTH HAZARD No
ACUTE HEALTH HAZARD Yes
FIRE HAZARD No
SUDDEN RELEASE OF PRESSURE HAZARD No
REACTIVE HAZARD Yes

Clean Water Act

Component CAS#	CWA Reportable Quantities	CWA Toxic Pollutants	CWA Priority Pollutants	CWA Hazardous Substances
SODIUM NITRITE 7632-00-0	100 lb			X

CERCLA

Component	CERCLA RQ (lb)	SARA TPQ (lb)
Sodium Nitrite	100 lb	

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right To Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium Nitrite	x	x	x		

Other International Regulations

Mexico No information available

Canada This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

WHMIS Hazard Class

C Oxidizing materials

D1B Toxic materials

D2B Toxic materials



Section 16: Other Information

ACGIH
NIOSH
TLV-TWA
WHMIS

American Conference of Governmental Industrial Hygienists
National Institute for Occupational Health and Safety
Threshold Limit, Time Weighted Average
Workplace Hazardous Materials Information System

This SDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. KCI provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of KCI. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made.