



DATA SAFETY SHEET

Product: SMART CUT™ KOOL

CAS Registry Number: Not applicable for mixtures.

Synonyms:

Item Number: SMART CUT KOOL

Generic/Chemical Name: Slicing, Dicing, Wafering, Drilling, Grinding, Lapping Fluid

Product Type: Water Soluble High Precision Diamond Machining Coolant

Preparation/Revision Date: 03/21/01, 08/25/02

INGREDIENTS	CAS #	%	ACGIH TWA	OSHA PEL	OSHA STEL	SKIN
2-Aminoisobutanol	124-68-5	5 - 30	none established	none established	none established	No
Proprietary Lubricity Agents	Mixture	none established	none established	none established		No
Proprietary Non-phenolic Biocide	Mixture	<0.5	none established	none established	none established	No

WARNING: NONE REQUIRED

Eye Contact: This product would not be expected to produce irritation upon contact with the eyes.

Skin Contact: This product is not expected to cause skin irritation. Prolonged or repeated exposure may lead to skin sensitization in some individuals and produce an allergic reaction.

Inhalation: This product is not expected to present an inhalation hazard unless mists are generated. Inhalation of product mist may be irritating to the respiratory tract.

Caution should be taken to prevent forming aerosol or misting of this product without proper respiratory protection.

Ingestion: This product would be regarded as practically non-toxic if swallowed.

Eye Contact: Not expected to require first aid measures.

Skin Contact: In case of contact, wash skin with soap and plenty of water. Remove contaminated clothing. If redness and irritation symptoms occur, seek medical aid. Wash contaminated clothing before reuse.



Skin Contact: In case of contact, wash skin with soap and plenty of water. Remove contaminated clothing. If redness and irritation symptoms occur, seek medical aid. Wash contaminated clothing before reuse.

Inhalation: If inhaled and irritation or difficulty in breathing occurs, remove to fresh air. Seek medical attention if irritation or discomfort persists.

Oral Contact: Not an expected route of overexposure.

Flash Point: None

Upper Flammable Limit: Not applicable.

Lower Flammable Limit: Not applicable.

Extinguishing Media: Use dry chemical, foam, water fog or carbon dioxide appropriate for the surrounding fire.

Special Fire fighting Procedures: Exercise caution when fighting any chemical fire. A self-contained breathing apparatus and protective clothing are essential.

Unusual Fire & Explosion Hazards: No unusual hazards.

Byproducts of Combustion: Thermal decomposition or combustion may produce carbon dioxide, carbon monoxide, ammonia, and/or nitrogen oxides.

Autoignition Temperature: Not determined.

Explosion Data: Not determined. Care should always be taken in mist areas.

Spill Control Procedures (Land): Wearing appropriate personal protective equipment, contain spill, collect onto inert absorbent and place into suitable containers.

Spill Control Procedures (Water): Water-soluble. Not expected to create an environmental hazard.

Waste Disposal Method: All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations.

Handling Procedures: Avoid prolonged or repeated contact with skin and clothing. Avoid breathing mist. Use with adequate ventilation. Wash thoroughly after handling.

Keep container closed when not in use.

Storage Procedures: No specific requirements.

Additional Information: No additional information.



Personal Protection: Applicable mainly to persons in repeated contact situations such as packaging of product, service/maintenance, and cleanup/spill control personnel.

Respiratory Protection: When misting may occur in the work area, use a NIOSH approved respirator in accordance with respiratory requirements of OSHA 29 CFR 1910.134.

Eye and Face Protection: Eye protection is always recommended. Use splash goggles or face shield.

Hand Protection: Chemical resistant gloves to avoid skin sensitization and absorption.

Other Protection: Use of an apron or other protective clothing is recommended to avoid skin sensitization. Launder soiled clothes.

Local Control Measures: Use adequate ventilation when working with material in an enclosed area. Use exhaust ventilation where mist or spray may be generated. Eyewash stations and showers should be available where this material is used and stored.

Other: Good practice dictates that consumption of food and drink should be avoided in work areas where product is present. Always wash hands and face with soap and water before eating, drinking, or smoking.

Vapor Pressure: Negligible at STP (Standard Temperature and Pressure, 25°C at 1 ATM).

API Gravity: 5.9° at 15.6°C (60°F) by ASTM D 1298

Density: 8.58 lb./gal at 15.6°C (60°F) by ASTM D 1298

Specific Gravity: 1.03 at 15.6°C (60°F) by ASTM D 1298

Solubility: Completely soluble in water, not soluble in hydrocarbon solvents.

Percent Volatile: Negligible at STP

Vapor Density, Air = 1: >1 at STP

Evaporation Rate, n-Butyl Acetate = 1: Negligible at STP.

Odor: Mild odor.

Appearance: Dark Blue Liquid

pH: 9.4 (5% solution in water)

Boiling Point: 100°C (212°F).

Freezing Point: Not determined

Molecular Weight: Not determined.

Stability: Material is stable at room temperature and pressure.

Conditions To Avoid: No specific information.

Incompatibility With Other Materials: Avoid contact with acids and oxidizing materials.

Hazardous Decomposition Products: Thermal decomposition or combustion may produce carbon dioxide, carbon monoxide, ammonia, and/or nitrogen oxides.



Hazardous Polymerization: Will not occur.

Oral Toxicity: Product oral LD50 (rat) > 5 g/kg.

Dermal Toxicity: Repeated or prolonged contact may cause skin irritation or sensitization.

Inhalation Toxicity: On rare occasions, prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as chronic lung inflammation. This condition is usually asymptotic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms. Based on data from similar materials.

Dermal Sensitization: Prolonged or repeated contact may make skin more sensitive to other skin sensitizers. Based on data from similar materials.

Chronic Toxicity: No ingredients considered chronic toxins.

Carcinogenicity: No ingredients listed by IARC, NTP or OSHA.

Mutagenicity: Not determined.

Reproductive Toxicity: Not determined.

Teratogenicity: Not determined.

Other: Not determined

Environmental Toxicity: No information available on formulated product or ingredients.

Environmental Fate: No data available.

Waste Disposal: Discarded product as sold would not be considered a RCRA hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Disposal Considerations Place used, contaminated, or excess material into disposable containers. Used or spent product is not considered to be a hazardous waste. Spent fluid should be filtered, centrifuged or allowed to settle to remove solids. Solid waste from normal machining operations should be non-hazardous and suitable for landfill or recycling. The supernatant or filtered product, after solids removal, can be discharged according to potable water (POTW) permits to commercial water treatment plants. Always dispose of in a manner consistent with local and state regulations.

U.S. DOT Bulk Shipping Description: Does not apply to bulk shipping.

U.S. DOT Non-Bulk Shipping Description: Does not apply to non-bulk shipping.

U.S. DOT Identification Number: Not applicable.

U.S. DOT Hazard Classification: Not applicable.

Other: See 49 CFR for additional requirements for descriptions, allowed modes of transport, and packaging. For more information concerning spills during transport, consult latest DOT Emergency Response Guidebook for Hazardous Materials Incidents, DOT P 5800.3.

Clean Water Act/Oil Pollution Act: Not applicable.

OSHA Hazard Communication Status: Hazardous



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TSCA: All components of this material are listed in the U.S. TSCA Inventory.

Other TSCA: Not applicable.

SARA Title III: Section 302/304 Extremely Hazardous Substances: None. Section 311, 312 Hazard Categorization: Acute (immediate health effects): No Chronic (delayed health effects): No Fire (hazard): No Reactivity (hazard): No Pressure (sudden release hazard): No Section 313 Toxic Chemicals: None.

CERCLA: For stationary sources - reportable quantity: Not determined. Due to: Not applicable. For moving sources - reportable quantity: Not determined. Due to: Not applicable. Recommend contacting the local authorities in the event of any type of spill to determine local reporting requirements and also to aid in the cleanup.

California Prop. 65: Not applicable.

NFPA 704 NPCA-HMIS KEY

HEALTH: 2 2 0 = Minimal

FIRE: 0 0 1 = Slight

REACTIVITY: 0 0 2 = Moderate

SPECIFIC HAZARD: NONE N/A 3 = Serious

PROTECTION INDEX: N/A B 4 = Severe

Precautionary Labels: WARNING - NONE REQUIRED This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, UKAM Industrial Superhard Tools must rely upon information provided by the material manufacturers or distributors.

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