MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: MET-KOOL

Manufacturer's Product Code: 9035

Other Names: Aerosol chemical cutting fluid.

Major Recommended Uses: As a chemical coolant and lubricant for tooling operations.

Supplier's Details: Chemsearch Australia
5 Ralph Street, Alexandria
Sydney NSW 2015
Telephone Number (Office Hours): (02) 9669 0260
Fax Number: (02) 9693 1562
Emergency Telephone Number: 0401718972

Date of Issue: Feb 2015

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SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification: Not classified as hazardous according to the criteria of ASCC.

Dangerous Goods Class & Sub-risk: Class 2.1, no sub-risk.

Poisons Schedule: None allocated.

Risk Phrases: Flammable (- propellant).

Safety Phrases: Keep container in a well-ventilated place.
Keep away from sources of ignition - no smoking.

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SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	CAS No	Proportion
'Ingredients determined not to be hazardous'	100%	
(Distillates (petroleum), hydrotreated heavy naphthenic [Base oil unspecified]	64742-52-5	>60%

These petroleum distillates are severely hydrotreated, severely solvent extracted, and/or processed by mild hydrotreatment and extraction. For this reason, they are not classified as cancer hazards.)

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SECTION 4 – FIRST AID MEASURES

Skin: Wash affected areas with plenty of soap and water for several minutes. Seek medical attention if irritation develops.

Eye: Rinse eyes with water. Remove any contact lenses and continue flushing with water for 15-minutes. Seek medical attention if irritation develops.

Inhalation: Remove to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion: Give 3-4 glasses of water, but do NOT induce vomiting. If vomiting occurs, give fluids again. Seek medical attention if discomfort occurs.

First Aid Facilities: General eyewash and safety shower.

Advice to Doctor: Do not induce vomiting – ingestion and subsequent vomiting of this product can lead toaspiration of the product into the lungs. Depending on the amount ingested and retained, gastric lavage should be considered. If comatose, a cuffed endotracheal tube will prevent aspiration. Primary route of entry is inhalation. Primary routes of exposure are skin and eye contact.

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SECTION 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Media: In the event of a fire, powder, foam, and CO_2 are the recommended extinguishing agents. Extinguishing media should be chosen based on the nature of the surrounding fire.

Special Protective Equipment and Precautions for Fire Fighters: Fire fighters should wear self-contained breathing apparatus and full protective gear.

Fire/Explosive Hazards: Use water to cool fire exposed containers to prevent bursting. Vapours are heavier than air and may travel to distant and or low-lying sources of ignition and flashback. Product may produce a floating fire hazard as liquid floats on water. Flame extension is 600mm; burn-back is 150mm.

Hazchem Code: 2Y

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SECTION 6 – ACCIDENTAL RELEASE MEASURES

Wear appropriate protective clothing.
Methods and Materials for Containment and Clean Up: Due to the nature of aerosol packaging, a large spill is unlikely. For a small spill, ventilate the area, eliminate sources of ignition and absorb with an inert material. Dispose of waste in a closed, labelled container in accordance with local, state and federal laws. Typical disposal is to wrap the empty aerosol container in several layers of newspaper and dispose of in the garbage. Do not puncture or incinerate the can. Spills may be slippery.

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SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling: Observe precautions stated on product label, and follow industry safety regulations. Eating and smoking should be prohibited where the preparation is used. Use with caution around heat, sparks, pilot lights, static electricity and open flame.

Conditions for Safe Storage: Store indoors in a dry, well-ventilated area. Store below 49°C.

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SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards: Not established for this mixture. The exposure limit for the butane propellant is TWA – 800ppm (1900mg/m³). Refined mineral oil mist has a TWA of 5mg/m³.

Engineering Controls: General exhaust is usually adequate, although local ventilation is recommended to control exposure from operations that can generate mists or vapours. Minimise use in confined spaces.

Personal Protective Equipment:
Eye/Face Protection: Wear safety glasses or solvent resistant mask if the method of use presents the likelihood of eye contact. AS1336 and AS/NZS1337 should be consulted for information on eye protection.

Skin Protection: Neoprene or nitrile rubber gloves should be worn if repeated or prolonged skin contact is likely. Wear general-duty work clothes and shoes. Remove oil soaked clothing and shoes and wash before reuse.

Respiratory Protection: None required under normal conditions of use. If misting is likely to occur, or if used in confined or poorly ventilated areas where exposure will be above the TLV, an approved

organicvapour respirator meeting the requirements outlined in AS/NZS 1715 and AS/NZS 1716 should be used.

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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Transparent, yellow-amber, slightly viscous liquid with a petroleum odour.
pH:	Not applicable
Vapour Pressure:	<0.1mm Hg
Vapour Density:	1.7 (Air = 1)
Boiling Point:	240ºC
Solubility in Water (g/L):	Negligible
Specific Gravity:	0.88 (At 25 ºC ; water = 1)
Flashpoint:	>93°C
Flashpoint Method:	Setaflash
Flammability Limits:	LEL: 1.8; UEL: 9.5
% Volatiles by Volume:	17

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SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable.

Hazardous Polymerisation: Will not occur.

Conditions/Materials to Avoid: Avoid heat, hot surfaces, sparks, and open flames.
Keep away from strong oxidising agents such as chlorine bleach, concentrated hydrogen peroxide, dichromates and permanganates.

Hazardous Decomposition Products: Oxides of carbon; aldehydes and ketones.

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SECTION 11 – TOXICOLOGICAL INFORMATION

Health Effects:
Acute - Swallowed: May cause irritation with possible nausea, vomiting and diarrhoea.

Acute - Eye: May cause irritation seen as stinging, tearing and redness.

Acute - Skin: May cause irritation seen as itching and redness. Prolonged or repeated contact as from clothing wet with material may cause drying, defatting, and cracking of the skin.

Acute - Inhaled: May cause respiratory irritation seen as coughing and sneezing. At low vapour concentrations, no harmful effects are expected. Inhalation of large amounts may cause dizziness, headache, drowsiness and other central nervous system effects including heart irregularities and possible anesthetic effects from central nervous system depression.

Chronic: Due to the use pattern of this product, the likelihood of any chronic effects occurring is remote. Chronic skin contact may promote dermatitis and oil acne. Medical conditions aggravated by exposure are pre-existing cardiovascular diseases and pre-existing respiratory and skin conditions such as asthma, emphysema, and dermatitis. The primary routes of exposure are skin and eye contact.

Target Organs: Central nervous system and heart.

Product Contains Chemicals Listed as Carcinogens by:
International Agency for the Research of Cancer (IARC): NO Other: NO

SEVERELY HYDROTREATED HEAVY NAPHTHENIC PETROLEUM DISTILLATES
ORL-RAT LD50: >5g/kg
SKN-RBT LD50: >3g/kg
SKN-RBT IRRITATION <0.5/8.0; NO APPRECIABLE EFFECT
EYE-RBT IRRITATION <15/110; NO APPRECIABLE EFFECT
Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals.

Effects from single and short-term repeated exposures to high concentrations well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation, and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations at or near current work place exposure levels produced no significant toxicological effects. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested. These petroleum distillates are severely hydrotreated, severely solvent extracted, and/or processed by mild hydrotreatment and extraction. For this reason, they are not classified as cancer hazards.

PROPANE	IHL-LC50 >40% BY VOLUME
N-BUTANE	IHL-RAT LC50: 658 g/m^3/4H

Human volunteers exposed repeatedly to gases of similar hydrocarbon mixtures ranging from 250 to 1000ppm exhibited no cardiac or pulmonary function abnormalities.

[REFERENCES: Vendor's MSDS and Registry of Toxic Effects of Chemical Substances, CCInfoweb, 2005. All the components of this product are in compliance with the Toxic Substances Control Act (TSCA) and are either listed on the TSCA Inventory or otherwise exempted from listing.]

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SECTION 12 – ECOLOGICAL INFORMATION

No specific toxicology data on this product is available. When used as indicated, no adverse environmental effects are foreseen. Avoid contaminating waterways.

Persistence/Degradability: Not readily biodegradable; slowly biodegradable in aerobic conditions.

Mobility in Soil: Not soluble in water.

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SECTION 13 – DISPOSAL CONSIDERATIONS

Do not incinerate or puncture aerosol cans. If aerosol can develops a leak, allow to fully discharge before disposal. Prevent disposal in sewers and waterways. Normally suitable for disposal at approved land waste site, but review Federal, State and local government requirements prior to disposal.

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SECTION 14 – TRANSPORT INFORMATION

UN Number:	UN1950
UN Proper Shipping Name:	Aerosol
Transport Hazard Class:	ADG Class 2.1, no sub-risk.
Packaging Group:	Not applicable.
Hazchem Code:	2Y

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SECTION 15 - REGULATORY INFORMATION

Poisons Schedule: None allocated ; (- flammable propellant)

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SECTION 16 – OTHER INFORMATION

Since the user's working conditions are not known by the supplier, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The product must not be used for any purposes other than those specified in Section 1 without first obtaining written handling instructions. CHEMSEARCH AUSTRALIA assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such non-recommended use, storage or disposal of the product.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties.