Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name/Identifier	5-in-1 Surface Cleaner
Product Code	BC8613
Product Use	For cleaning of precision components such as periscopes, mirrors in copiers, LCD Monitors, touch screen monitors, optical lens etc.
Company Information	Vance Chemicals Pte Ltd No.24 Gul Lane Singapore 629418 +65 6863 0863 msds@mr-mckenic.com
Emergency Contact	+65 9299 8024

SECTION 2 HAZARDS INDENTIFICATION

GHS CLASSIFICATION

Health		Environmental	Physical
Eye irritation	Category 3	Not Classified	Not Classified
Skin irritation	Category 2		

GHS LABEL:

EU LABEL:

Hazard Statements:

Code	Health hazard statements	Hazard class	Hazard category
H316	**Causes mild skin irritation**	Skin corrosion/irritation (chapter 3.2)	3
H320	**Causes eye irritation**	Eye damage/irritation(chapter 3.3)	2

Precautionary Statements

Code	Prevention precautionary statements	Hazard class	Hazard category
P264	**Wash thoroughly after handling**	Eye damage/irritation(chapter 3.3)	2

Response:

Code	Response precautionary statements	Hazard class	Hazard category
P305+P351 +P338	**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing**	Eye damage/irritation(chapter 3.3)	2
P332+P313	**If skin irritation occurs: Get medical advice/attention.**	Skin corrosion/irritation (chapter 3.2)	3
P337+P313	**If eye irritation persists: Get medical advice/attention.**	Eye damage/irritation(chapter 3.3)	2

SECTION 3 COMPOSITIONS / INFORMATION ON INGREDIENTS

Chemical Identity	CAS #	EINECS #	R Phrase	S Phrase	Weight %
Isopropyl alcohol	67-63-0	200-661-7	R11,R36,R67	S7, S16, S24/25, S26	10-30
Non-hazardous materials	Mixture	-	-	-	>80

SECTION 4 FIRST AID MEASURES

Eye contact	Immediately flush thoroughly with water for at least 15 minutes.
Skin contact	Wash thoroughly with soap and water.
Inhalation	Remove to open area for fresh air. If rapid recovery does not occur, transport to the nearest medical facility for additional treatment.
Ingestion	If conscious, give water and induce vomiting immediately as directed by medical personnel.

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SECTION 5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Dry chemical, "alcohol" foam, or carbon dioxide. Use water spray to cool fire-exposed containers and disperse vapors.
Unsuitable Extinguishing Media	No restrictions
Specific Hazards Arising from the Chemical	Decomposition under fire conditions will generate carbon monoxide and may generate other potentially toxic vapors.
Protection for Fire-fighters	Wear self-contained NIOSH-approved breathing apparatus (e.g., chemical cartridge respirator with an organic vapor cartridge and full face piece). Keep containers cool and reduce vapors with water spray.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions and Protective Equipment	Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Keep away from open flames, hot surfaces and sources of ignition. Keep away from incompatible products. Isolate the area. Cover the spreading liquid with foam in order to slow down the evaporation. Ventilate the area.
Environmental Precautions	Prevent discharges into the environment (sewers, rivers, soils). Immediately notify the appropriate authorities in case of discharge.
Method for Cleaning Up & Containment	If possible, dam large quantities of liquid with sand or earth. Collect the product with suitable means. Place everything into a closed, labeled container compatible with the product. Flush with plenty of water. Prevent product from entering drains. Treat recovered material as described in the section "Disposal considerations".
Emergency Procedures	Shut off leaks, if possible without personal risks. Remove all possible ignitions in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth or other appropriate barriers. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas indicator.

SECTION 7 HANDLING AND STORAGE

Normal handling: Always wear recommended personal protective equipment.
Storage recommendation: Keep container closed. Store in a cool area away from oxidizers. Do not breathe vapor. Do not get in eyes. Avoid prolonged, or repeated, skin contact. Storage/Transport Pressure: Atmospheric

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SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
Isopropyl alcohol	Not Established	400ppm	400ppm	500ppm

Engineering Controls	Material should be handled or transferred in an approved fume hood or with adequate ventilation. If workplace exposure limit (s) of product or any component is exceeded (see TLV/PEL); a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier)

Personal Protective Equipment (PPE):

Eye Protection	Eye protection is not required under normal conditions of use. If material is handled such that it could be splashed into eyes, wear plastic face shield or splash-proof safety goggles.
Skin Protection	Apron/boots of neoprene if risk of splashing. For hand protection, use chemical resistant protective gloves such as Polyvinyl alcohol coated gloves.
Respiratory Protection	In the case of hazardous fumes, wear self contained breathing apparatus. Self-contained breathing apparatus in medium confinement/insufficient oxygen/in case of large uncontrolled emissions/in all circumstances when the mask and cartridge do not give adequate protection
Thermal hazards	NA

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Milky
Odour	Citrus
Odour Threshold	NA
pH	9 -11
Melting Point/ Freezing Point (°C)	Not determined
Initial boiling point and range (°C)	Not determined
Flash Point (°C) [According to ISO 3679, Closed Cup Testing]	Not applicable
Evaporation Rate	Not determined

Flammability (solid, gas)	Not applicable
Vapour Pressure	Not determined
Upper/lower Flammability (Explosive) Limits:	Not determined
Vapour Density	Not determined
Relative Density	0.98 ± 0.03
Solubility in water	Soluble
Partition coefficient (N-Octanol/water)	Not determined
Auto-ignition Temperature (°C)	Not determined
Decomposition Temperature:	Not determined
Viscosity (mPa s)	Not determined

SECTION 10 STABILITY AND REACTIVITY

Reactivity/Incompatible materials	Acids, oxidizers, halogens and halogen compounds; aldehydes
Chemical Stability	Stable under ordinary conditions of use and storage.
Possibility of hazardous reactions	Not determined
Hazardous decomposition products	No decomposition if stored normally
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources.
Materials to avoid	Acids, oxidizers, halogens and halogen compounds; aldehydes

SECTION 11 TOXICOLOGICAL INFORMATION

Ingredient Name: Isopropyl alcohol

Effects on humans:
Eye contact
- Can cause eye irritation

Skin contact
- May cause mild skin irritation

Ingestion
- Swallowing small amounts during normal handling is not likely to cause harmful effects. Swallowing large amounts may be

harmful. Swallowing large amounts may cause gastrointestinal tract irritation with nausea, vomiting and diarrhea, abdominal pain. It also may affect the urinary system, cardiovascular system, sense organs, behavior or central nervous system (somnolence, generally depressed activity, irritability, headache, dizziness, drowsiness), liver, and respiratory system (breathing difficulty).

Inhalation

- Breathing in small amounts of this material during normal handling is not likely to cause harmful effects. However, breathing large amounts may be harmful and may affect the respiratory system and mucous membranes (irritation), behavior and brain (Central nervous system depression - headache, dizziness, drowsiness, and stupor, in coordination, unconsciousness, coma and possible death), peripheral nerve and sensation, blood, urinary system, and liver.

Acute toxicity:
Acute oral toxicity (LD50): 5650 mg/kg [Rat].
Acute dermal toxicity (LD50): Not established.
Acute inhalation (LC50): 12500 ppm [Rat].

Skin corrosion/irritation: Not irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.

Serious eye damage/irritation: May cause eye irritation

Carcinogenicity: Not listed under IARC.

Specific target organ toxicity: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE]. May cause damage to the following organs: kidneys, liver, skin, central nervous system (CNS)

Chronic effects/Other toxicological information: May cause defatting of the skin and dermatitis and allergic reaction. May cause adverse reproductive effects based on animal data (studies). May cause adverse reproductive/teratogenic effects (fertility, fetoxicity, developmental abnormalities (developmental toxin)) based on animal studies. Detected in maternal milk in human.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity	Acute ecotoxicity Fishes; Low toxicity: LC/EC/IC50>100mg/l Aquatic Invertebrates; Low toxicity: LC/EC/IC50>1000mg/l Algae: Expected to have low toxicity: LC/EC/IC50>1000mg/l Microorganism: low toxicity: LC/EC/IC50>1000mg/l
Persistence/Degradability	Readily biodegradable meeting the 10 day window criterion. Oxidizes rapidly by photo-chemical reactions in the air
Bio accumulative Potential	Not expected to bioccumulate significantly
Mobility in soil	It will have high mobility in soil and potential to leach into groundwater. Upon release to the environment, the compound is expected to partition to and be transported in surface water and groundwater.

SECTION 13 DISPOSAL CONSIDERATIONS

Local legislation Dispose in compliance with local/federal and national regulations. It is recommended to contact the producer for recycling/recovery. Or send the product to an authorized hazardous waste incinerator.
Container Disposal To avoid treatments, as far as possible, use dedicated containers. If not, rinse the empty containers with a low volatility hydrocarbon and treat the effluent in the same way as waste. Containers that cannot be cleaned must be treated as waste.

SECTION 14 TRANSPORT INFORMATION

Land (ADR)

UN number	Not Regulated
UN Class	NA
Subsidiary risk	NA
Packing Group	NA
Proper shipping name	NA
HIN	NA

Sea (IMDG)

UN number	Not Regulated
UN Class	NA
Subsidiary risk	NA
Packing Group	NA
Proper shipping name	NA
Marine pollutant	NA

Sea (Annex II of MARPOL 73/78 and the IBC Code)

Pollution category	NA
Ship type	NA

Product name	NA

Air (IATA)

UN number	Not Regulated
UN Class	NA
Subsidiary risk	NA
Packing Group	NA
Proper shipping name	NA

Special precautions:

Before transportation, make sure the containers are tightly sealed and that there are no liquid or gas leaks.
When transporting containers, be sure that they are tightly fastened. An appropriate buffer material should be placed between them to prevent them from bumping each other and being damaged during transport.

SECTION 15 REGULATORY INFORMATION

EU Information

Risk Phrase:

R11	Highly flammable
R36	Irritating to eyes.
R67	Vapours may cause drowsiness and dizziness.

Safety Phrase:

S7	Keep container tightly closed.
S16	Keep away from sources of ignition – No smoking
S24/S25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

USA Information

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA)

Ingredient	CAS #	CERCLA RQ	RCRA Code

Isopropyl alcohol	67-63-0	-	-

Superfund Amendments and Reauthorization Act (SARA) Title III Information:
SARA Section 311/312 (40 CFR 370) Hazard Categories:

Ingredient	Acute Hazard	Chronic Hazard	Fire Hazard	Pressure Hazard	Reactivity Hazard
Isopropyl alcohol	Yes	Yes	No	No	No

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372): Isopropyl alcohol

Canada Information
WHMIS classification:
Isopropyl alcohol
- B2 Flammable liquid
- D2B Toxic material causing other toxic effects

SECTION 16 OTHER INFORMATION

Department issuing date sheet: Vance Chemicals Quality Control and Laboratory
Original Issue date: 1st January 2010
Issue date: N.A
Revision date: 7th July 2011

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