Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name/Identifier	9-In-1 Technology Oil
Product Code	ME1208-A
Product Use	Demoisturizing, Lubricant, Anti-rust
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 2	Not Classified	Not Classified
Skin irritation	Category 2A		
Carcinogenicity	Category 2		
Specific target organ toxicity, repeated exposure	Category 2		

GHS LABEL:

Hazard Statements:

H315 Causes skin irritation
H319 Causes serious eye irritation
H351 Suspected of causing cancer
H373 May cause damage to organs (kidney, liver, central nervous system) through prolonged or repeated exposure

Prevention Precautionary Statements:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash face, hands and any exposed skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.

Response Precautionary Statements:

P362 Take off contaminated clothing and wash before reuse.
P314 Get medical advice/attention if you feel unwell.

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minuts. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:
P405 Store lock up

Disposal:
P501 Dispose of content/containers according to the local/regional/national/international regulation.

SECTION 3 COMPOSITIONS / INFORMATION ON INGREDIENTS

Chemical Identity	CAS #	EINECS #	R Phrase	S Phrase	Weight %
Hydrotreated petroleum distillate (light)	64742-47-8	265-149-8	R65, R66	S23, S24, S62	10-30
Dichloromethane	75-09-2	200-838-9	R40	S23, S24/25, S36/37	>60
Carbon Dioxide	12438-9	204-696-9	-	-	<10
Non-hazardous materials	Mixture	-	-	-	10-30

SECTION 4 FIRST AID MEASURES

Eye contact
Immediately flush eyes with large amounts of water for at least 15 minutes while holding the eyelids open. If redness, swelling, pain and blister occur, transport to the nearest medical facility for additional treatment.

Skin contact
Remove contaminated clothing. Flush exposed area with large amount of water for at least 15 minutes followed by washing with soap. If redness, swelling, pain and blister occur, transport to the nearest medical facility for additional treatment.

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 swallowed, do not induce vomiting; transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspirations.

Most Important Symptoms/Effects, Acute and Delayed:
Eye irritation signs and symptoms may include burning sensation, redness, swelling and/or blurred vision. Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters. Defatting dermatitis signs and symptoms may include burning sensation and/or a dried/ cracked appearance. Respiratory irritation signs and symptoms may include burning sensation of the nose and throat, coughing and difficulty in breathing. If materials enter lungs, signs and symptoms may include coughing, chocking, wheezing, difficulty in breathing, chest congestion, shortness of breath and fever.

SECTION 5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media
Non-flammable. Use water spray, carbon dioxide, fog or foam to cool fire exposed surfaces and to protect personnel.

Unsuitable Extinguishing Media
Do not use water jet.

Specific Hazards Arising from the Chemical
Hazardous decomposition products. Formation of dangerous gas/vapours in case of decomposition. Gas/vapours may form flammable mixtures in presence of air.

Protection for Fire-fighters
Evacuate personnel to safe areas. Intervention only by capable personnel who are trained and aware of the hazards of the product. In the event of fire, wear self-contained breathing apparatus. When intervention in close proximity wear acid resistant over suit. Clean contaminated surface thoroughly.

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

Precautions for Safe Handling:
Use proper bonding and grounding (earthing) all equipment. Electrostatic discharge may cause fire. Prevent small spills and leakage to avoid slip hazard. Avoid contact with skin.

Conditions for Safe Storage:
Keep container dry. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Storage temperature: Ambient
Storage/Transport Pressure: Atmospheric

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
Hydrotreated petroleum distillate (light)	Not Established	Not Established	165ppm	Not Established
Dichloromethane	50ppm	Not Established	25ppm	125ppm

Engineering Controls
Ensure adequate ventilation. Provide appropriate exhaust ventilation at machinery. Refer to protective measures listed in sections 7 and 8. Apply technical measures to comply with the occupational exposure limits.

Personal Protective Equipment (PPE):
Eye Protection
Wear protective goggles for all industrial operations. If risk of splashing, chemical proof goggles/face shield.

Skin Protection
Apron/boots of neoprene if risk of splashing. For hand protection, use chemical resistant protective 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	Brown
Odour	Solvent odour
Odour Threshold	NA
pH	NA
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]	No flash point detected (From ambient temperature to 93°C)
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	1.12 ± 0.03
Solubility in water	Insoluble
Partition coefficient (N-Octanol/water)	Not determined
Auto-ignition Temperature (°C)	Not determined
Decomposition Temperature:	Not determined
Viscosity (mPa s)	0.63

SECTION 10 STABILITY AND REACTIVITY

Reactivity/Incompatible materials
Strong oxidizers, strong caustics, plastics, rubber, nitric acid, water + heat, and chemically active metals, such as aluminium and magnesium powder, sodium, potassium, and lithium. Avoid contact with open flames and electrical arcs. Liquid dichloromethane will attack some forms of plastics, rubber, and coatings.

Chemical Stability
Stable under ordinary conditions of use and storage.

Possibility of hazardous reactions
Not determined

Hazardous decomposition products
Will slowly decompose to hydrogen chloride when exposed to light and moisture. May produce carbon monoxide, carbon dioxide and phosgene when heated to decomposition.

Conditions to avoid
To avoid thermal decomposition, do not overheat. Keep away from direct sunlight. Avoid exposure to moisture.

Materials to avoid
Strong bases, oxidizing agents, salts of metals, non iron metals, certain plastic materials.

SECTION 11 TOXICOLOGICAL INFORMATION

Ingredient Name: Hydrotreated petroleum distillate (light)

Effects on humans:
Eyes contact
- May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials.

Skin contact
- Repeated exposure may cause skin dryness or cracking.

Inhalation
- May be irritating to nose, throat.

Ingestion
- May cause lung damage if swallowed.

Acute toxicity:
Acute oral toxicity (LD50): >15000mg/kg [Rat].
Acute dermal toxicity (LD50): >3600mg/kg [Rat].
Acute inhalation (LC50): >5500mg/l [Rat].

Skin corrosion/irritation: Minimally toxic.

Serious eye damage/irritation: Mild discomfort.

Carcinogenicity: Not listed under IARC.

Chronic effects/Other toxicological information:
For the product itself
Vapour/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects including death. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritations and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Ingredient Name: Dichloromethane

Effects on humans:
Eyes contact:
- Severe eye irritation, watering and redness. Risk of temporary eye lesions.
Skin contact:
- The product can be absorbed by intact skin. Irritation. In case of prolonged contact: risk of burns. In case of repeated contact: dry and chapped skin, risk of chronic dermatitis.
Inhalation:
- Slight nose irritation. At high concentrations, feelings of intoxication, restlessness, dizziness, nausea, vomiting, drowsiness. At high concentrations, risk of narcosis. At high concentrations, risk of chemical pneumonitis, pulmonary (o) edema. In case of repeated or prolonged exposure: headaches, fatigue and risk of nervous system
Ingestion:
- Breath smells of chloroform. Severe irritation of the mouth, throat, esophagus and stomach. Nausea, vomiting, abdominal cramps and diarrhea. Feelings of intoxication, restlessness, dizziness and drowsiness. Risk of loss of consciousness. Risk of chemical pneumonitis from product inhalation. Risk liver and kidney alterations. Risk of general symptoms.

Acute toxicity:
Acute oral toxicity (LD50): 1410-2524mg/kg [Rat].
Acute dermal toxicity (LD50): >2000mg/kg [Rat].
Acute inhalation (LC50): 52mg/l[Rat].

Skin corrosion/irritation: Rabbit, irritant

Serious eye damage/irritation: Rabbit, irritant

Carcinogenicity: Listed under IARC group 2B. Dichloromethane is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histological type(s), or by mechanism(s) that are not considered relevant to worker exposure.

Specific target organ toxicity: Oral route, after repeated exposure, Target organ: liver, >= 200 mg/kg.
Inhalation, after prolonged exposure, mouse, Target organ: liver / lungs, carcinogenic effect.
Inhalation, after repeated exposure, various species, Target organ: liver / kidney / lungs / central nervous system, >= 1.000ppm.

Reproductive toxicity: No information was found in the secondary sources searched to indicate that Dichloromethane is a developmental/reproductive toxicant in humans. No significant developmental effects were observed in female rats and mice exposed to 1250 ppm during gestation. A similar result was observed in rats exposed to 4500 ppm before and during gestation. A two-generation inhalation study showed no adverse reproductive effects in rats exposed to as much as 1500 ppm for 14 weeks.

Germ cell mutagenicity: Dichloromethane has been evaluated for its potential to induce genotoxic effect in vitro and in vivo systems with mixed results. Based on this evidence, Dichloromethane exposure may be considered to be a weak mutagen in mammalian systems.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity
No data available

Persistence/Degradability
Not expected to bio-accumulate significantly

Bio accumulative Potential
Not expected to bio-accumulate significantly

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. The incinerator must be equipped with a system for the neutralization or recovery of HCl.

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	1950
UN Class	2.2
Subsidiary risk	NA
Packing Group	NA
Proper shipping name	Aerosol, non-flammable
HIN	NA

Sea (IMDG)

UN number	1950
UN Class	2.2
Subsidiary risk	NA

Packing Group	NA
Proper shipping name	Aerosol, non-flammable
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	1950
UN Class	2.2
Subsidiary risk	NA
Packing Group	NA
Proper shipping name	Aerosol, non-flammable

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:

R40	Limited evidence of a carcinogenic effect
R65	Harmful: may cause lung damage if swallowed
S66	Repeated exposure may cause skin dryness or cracking

Safety Phrase:

S23	Do not breathe gas/fumes/vapour/spray
S24	Do not breathe gas/fumes/vapour/spray
S24/25	Avoid contact with skin and eyes.
S36/37	Wear suitable protective clothing and gloves
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

USA Information

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA)

Ingredient	CAS #	CERCLA RQ	RCRA Code
Dichloromethane	75-09-2	1000	U080

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
Hydrotreated petroleum distillate (light)	Yes	Yes	Yes	No	No
Dichloromethane	Yes	Yes	No	No	No

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

Canada Information
WHMIS classification:
Dichloromethane

- D1B Toxic material causing immediate and serious toxic effects
- D2A Very toxic material causing other toxic effects carcinogenicity: IARC group 2B
- D2B Toxic material causing other toxic effects eye irritation in animals; skin irritation in animals

SECTION 16 OTHER INFORMATION

Department issuing date sheet: Vance Chemicals Quality Control and Laboratory
Original Issue date: 1st January 2010
Revision no: 04
Revision date: 13 March 2014

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