SAFETY DATA SHEET

CORTEVA AGRISCIENCE NEW ZEALAND LIMITED

Product name: Uptake™ Spraying Oil **Issue Date**: 06.08.2024

CORTEVA AGRISCIENCE NEW ZEALAND LIMITED encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of New Zealand and may not meet the regulatory requirements in other countries.

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Uptake™ Spraying Oil
Identified uses: Adjuvant

COMPANY IDENTIFICATION
CORTEVA AGRISCIENCE NEW ZEALAND LIMITED
Private Bag 2017
NEW PLYMOUTH 4342
NEW ZEALAND

Customer Information Number: 0800-803-939
NZCustomerservice@corteva.com

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact: +64 6 751 2407
Local Emergency Contact: 0800 844 455

For medical advice, contact the New Zealand Poisons Information Centre:
0800 POISON (0800 764 766)
Transport Emergency Only Dial: 111

This SDS may not provide exhaustive guidance for all the GHS controls assigned to this substance. The NZ EPA website www.epa.govt.nz should be consulted for a full list of triggered controls and cited regulations.

2. HAZARDS IDENTIFICATION

Hazard classification
NEW ZEALAND HAZARDOUS SUBSTANCES CLASSIFICATION: Classified as hazardous according to criteria in the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Notice 2017, and the Hazardous Substances (Classification) Notice 2017. Refer to Section 15 for EPA Approval Number.

GHS classifications:
Acute oral toxicity - Category 4
Skin irritation - Category 2
Serious eye damage/irritation – Category 2
Acute aquatic toxicity - Category 2
Chronic aquatic toxicity - Category 2

Signal word: **WARNING!**

Hazards
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Toxic to aquatic life with long lasting effects.

Prevention
Read label before use.
Wash hands and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/ eye protection/face protection.
Avoid release to the environment.

Response:
IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
Specific treatment – see Section 4: First Aid instructions, on this SDS.
Take off contaminated clothing and wash before re-use.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Collect spillage.

Storage
Store locked up.

Disposal
Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CASRN	Concentration
Distillates (petroleum), hydrotreated light paraffinic; Base oil — unspecified	64742-55-8	66 %
Alkylphenol alkoxylate	69029-39-6	10 – 20 %
Alcohols, C12-15, ethoxylated	68131-39-5	10 – 20 %
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	3 – 10%
Naphthalene	91-20-3	0.3 – 1 %

4. FIRST AID MEASURES

Consult the National Poisons Information Centre (0800 POISON (0800 764 766)) or a doctor in every case of suspected chemical poisoning. Never give fluids or induce vomiting if a patient is

unconscious or convulsing regardless of cause of injury. If breathing difficulties occur seek medical attention immediately.

Description of first aid measures
General advice: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Eye contact: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control centre or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.

Ingestion: Immediately call a poison control centre or doctor. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed: Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed
Notes to physician: If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. The decision of whether to induce vomiting or not should be made by a physician. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control centre or doctor or going for treatment.

5. FIREFIGHTING MEASURES

Hazchem code: ●3Z

Suitable extinguishing media: Water spray. Dry chemical. Carbon dioxide. Alcohol resistant foam.

Unsuitable extinguishing media: Do not use direct water stream. May spread fire.

Special hazards arising from the substance or mixture
Hazardous combustion products: Exposure to combustion products may be a hazard to health. Dense smoke is produced when product burns.

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Advice for firefighters
Fire Fighting Procedures: Evacuate area. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Move container from fire area if this

is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this SDS.

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (includes fire-fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Isolate area. Refer to section 7: Handling, for additional precautionary measures. No smoking in area. Use appropriate safety equipment. For additional information, refer to Section 8: Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12: Ecological Information. Spills or discharge to natural waterways is likely to kill aquatic organisms.

Methods and materials for containment and cleaning up: Clean up remaining materials from spill with suitable absorbant. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, recovered material should be stored in a vented container. The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to over-pressurisation of the container. Keep in suitable, closed containers for disposal. Wipe up with absorbent material (e.g. cloth, fleece). See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapor or mist. Smoking, eating and drinking should be prohibited in the application area. Take care to prevent spills, waste and minimize release to the environment. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Conditions for safe storage: Store closed original container. Do not store near food, foodstuffs, drugs or potable water supplies. Do not store near strong oxidizing agents.

This substance is subject to a requirement for an emergency management plan, secondary containment and signage, whenever it is held in quantities of 1,000 L or more, either alone or in aggregate with other hazardous substances. See Hazardous Substances Emergency Management and Identification Regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

Components with workplace control parameters.

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), hydrotreated light paraffinic; Base oil — unspecified	64742-55-8	WES-TWA (Mist)	5 mg/m3	NZ OEL
		WES-STEL (Mist)	10 mg/m3	NZ OEL
		TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
Alkylphenol alkoxylate	69029-39-6	TWA	2 mg/m3	Dow IHG
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	TWA	100 mg/m3	Corteva OEL
		STEL	300 mg/m3	Corteva OEL
		TWA	200 mg/m3 (total hydrocarbon vapour)	ACGIH
Naphthalene	91-20-3	WES-TWA	0.5 ppm 2.6 mg/m3	NZ OEL
	Further information: Suspected human carcinogen, Skin absorption			
		WES-STEL	2 ppm 10 mg/m3	NZ OEL
	Further information: Suspected human carcinogen, Skin absorption			
		TWA	10 ppm	Dow IHG
		STEL	15 ppm	Dow IHG
		TWA	10 ppm	ACGIH

Exposure controls

Engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection: Use chemical goggles.

Hand protection: Use chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Viton. Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 4 or higher (breakthrough time greater than 120 minutes according to AS/NZS 2161.10) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to AS/NZS 2161.10) is recommended.

NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection),

potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.
Other protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed, however, if discomfort is experienced, use an approved air-purifying respirator.

Other Information: Selection and use of personal protective equipment should be in accordance with the recommendations in one or more of the relevant Australian/New Zealand Standards, including:
AS/NZS 1336: Eye and Face protection - Guidelines.
AS/NZS 1337: Personal eye protection - Eye and face protectors for occupational applications.
AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment.
AS/NZS 2161: Occupational protective gloves.
AS/NZS 2210: Occupational protective footwear.
AS/NZS 4501: Occupational protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance - Physical state	Liquid.
- Colour	Yellow
Odour	Aromatic
Odour Threshold	No data available
pH	7.2. 10% solution. CIPAC MT 75.2
Melting point/range	Not applicable to liquids
Freezing point	No data available
Boiling point (760 mmHg)	> 180 °C *Literature*
Flash point	> 100 °C Pensky-Martens Closed Cup ASTM D 93, closed cup
Evaporation Rate (Butyl Acetate = 1)	No data available
Flammability (solid, gas)	Not applicable to liquids
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour Pressure	No data available
Relative Vapour Density (air = 1)	No data available
Relative Density (water = 1)	No data available
Water solubility	Emulsion
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Kinematic Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Liquid density	0.880 g/cm3 at 20.0 °C

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: No decomposition if stored and applied as directed. Stable under normal conditions.

Possibility of hazardous reactions: Stable under recommended storage conditions.

Conditions to avoid: Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems.

Incompatible materials: Avoid contact with: Strong oxidizers.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	:	LD50 (Rat, female): > 5,000 mg/kg Method: OECD Test Guideline 423 Assessment: The substance or mixture has no acute oral toxicity. Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. Remarks: Information source: Internal study report
Acute inhalation toxicity	:	LC50 (Rat): > 5.58 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Symptoms: No deaths occurred at this concentration. Assessment: The substance or mixture has no acute inhalation toxicity. No adverse effects are anticipated from single exposure to mist. Based on the available data, respiratory irritation was not observed. Remarks: Information source: Internal study report
Acute dermal toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity. Prolonged skin contact is unlikely to result in absorption of harmful amounts. Remarks: Information source: Internal study report

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Acute oral toxicity	:	Remarks: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause abdominal discomfort or diarrhoea. For similar material(s): LD50 (Rat): > 5,000 mg/kg

Acute dermal toxicity	:	Remarks: Prolonged skin contact is unlikely to result in absorption of harmful amounts. For similar material(s): LD50 (Rabbit): > 5,000 mg/kg

Alkylphenol alkoxylate:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute dermal toxicity	:	LD50 (Rabbit, male and female): > 2,000 mg/kg

Alcohols, C12-15, ethoxylated:

Acute oral toxicity	:	Remarks: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. LD50 (Rat): 1,200 mg/kg
Acute dermal toxicity	:	Remarks: Prolonged skin contact is unlikely to result in absorption of harmful amounts. LD50 (Rat): 5,000 mg/kg

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 11.4 mg/l Exposure time: 6 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity

Naphthalene:

Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg Lethal Dose (Humans): 5 - 15 grams Method: Estimated. Remarks: Excessive exposure may cause haemolysis, thereby impairing the blood's ability to transport oxygen. Ingestion of naphthalene by humans has caused haemolytic anaemia. Toxicity from swallowing may be greater in humans than in animals. In humans, symptoms may include: Confusion. Lethargy. Muscle spasms or twitches. Convulsions. Coma.
Acute inhalation toxicity	:	Remarks: Excessive exposure may cause irritation to upper respiratory tract (nose and throat). Excessive exposure may cause lung injury. Signs and symptoms of excessive exposure

may include: Headache. Confusion. Sweating. Nausea and/or vomiting.

LC50 (Rat): > 0.41 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Symptoms: The LC50 value is greater than the Maximum Attainable Concentration.
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 2,500 mg/kg
Remarks: Human case reports suggest Naphthalene may be absorbed through the skin in toxic amounts, especially in children.

LD50 (Rabbit): > 2,500 mg/kg

Skin corrosion/irritation

Product:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Mild skin irritation
Remarks	:	Information source: Internal study report

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Result	:	No skin irritation

Alkylphenol alkoxylate:

Species	:	Rabbit
Result	:	No skin irritation

Alcohols, C12-15, ethoxylated:

Result	:	Skin irritation

Serious eye damage/eye irritation

Product:

Species	:	Rabbit
Result	:	Mild eye irritation
Method	:	OECD Test Guideline 405
Remarks	:	Information source: Internal study report

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Result	:	No eye irritation

Alkylphenol alkoxylate:

Species	:	Rabbit
Result	:	No eye irritation

Alcohols, C12-15, ethoxylated:

Result	:	Corrosive

Respiratory or skin sensitisation

Product:

Test Type	:	Local lymph node assay (LLNA)
Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 429
Remarks	:	Information source: Internal study report

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Assessment	:	Does not cause skin sensitisation.
Remarks	:	For similar material(s): Did not cause allergic skin reactions when tested in guinea pigs.
Remarks	:	For respiratory sensitization: No relevant data found.

Alkylphenol alkoxylate:

Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.

Alcohols, C12-15, ethoxylated:

Remarks	:	Did not cause allergic skin reactions when tested in guinea pigs.
Remarks	:	For respiratory sensitization: No relevant data found.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Remarks	:	Did not cause allergic skin reactions when tested in humans.
Remarks	:	For respiratory sensitization: No relevant data found.

Naphthalene:

Assessment	:	Does not cause skin sensitisation.
Remarks	:	Skin contact may cause an allergic skin reaction in a small proportion of individuals. Did not cause allergic skin reactions when tested in guinea pigs.
Remarks	:	For respiratory sensitization: No relevant data found.

Chronic toxicity

Germ cell mutagenicity

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Germ cell mutagenicity - Assessment	:	In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.

Alkylphenol alkoxylate:

Germ cell mutagenicity - Assessment	:	In vitro genetic toxicity studies were negative.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Germ cell mutagenicity - Assessment	:	In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Naphthalene:

Germ cell mutagenicity - Assessment	:	In vitro genetic toxicity studies were negative in some cases and positive in other cases.

Carcinogenicity

Product:

Carcinogenicity - Assessment	:	Animal testing did not show any carcinogenic effects.

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Carcinogenicity - Assessment	:	Limited evidence of carcinogenicity in animal studies Contains naphthalene which has caused cancer in some laboratory animals. In humans, there is limited evidence of cancer in workers involved in naphthalene production. Limited oral studies in rats were negative.

naphthalene:

Carcinogenicity - Assessment	:	Limited evidence of carcinogenicity in animal studies Has caused cancer in some laboratory animals. In humans, there is limited evidence of cancer in workers involved in naphthalene production. Limited oral studies in rats were negative.

Reproductive toxicity

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Reproductive toxicity - Assessment	:	In animal studies, did not interfere with reproduction. Typical for this family of materials., Has been toxic to the foetus in laboratory animals at doses toxic to the mother.

Alkylphenol alkoxylate:

Reproductive toxicity - Assessment	:	In animal studies, did not interfere with reproduction., In animal studies, did not interfere with fertility. Did not cause birth defects or any other foetal effects in laboratory animals.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Reproductive toxicity - Assessment	:	Available data are inadequate to determine effects on reproduction. For similar material(s): Did not cause birth defects or any other foetal effects in laboratory animals.

naphthalene:

Reproductive toxicity - Assessment	:	Available data are inadequate to determine effects on reproduction. Did not cause birth defects in laboratory animals.

STOT - single exposure

Product:

Assessment	:	Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Assessment	:	Available data are inadequate to determine single exposure specific target organ toxicity.

Alkylphenol alkoxylate:

Assessment	:	Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Alcohols, C12-15, ethoxylated:

Assessment	:	Available data are inadequate to determine single exposure specific target organ toxicity.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Exposure routes	:	Inhalation
Target Organs	:	Nervous system
Assessment	:	May cause drowsiness or dizziness.

naphthalene:

Assessment	:	Available data are inadequate to determine single exposure specific target organ toxicity.

STOT - repeated exposure

Product:

Assessment	:	Evaluation of available data suggests that this material is not an STOT-RE toxicant.

Repeated dose toxicity

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Remarks	:	For similar material(s): In animals, effects have been reported on the following organs: Adrenal gland. Bone marrow. Liver. Thymus. Stomach. Lung.

Alkylphenol alkoxylate:

Remarks	:	In animals, effects have been reported on the following organs: Kidney. Liver.

Alcohols, C12-15, ethoxylated:

Remarks	:	No relevant data found.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Remarks	:	Excessive exposure to solvent(s) may cause respiratory irritation and central nervous system depression.

Naphthalene:

Remarks	:	Observations in animals include: Respiratory effects. Excessive exposure may cause haemolysis, thereby impairing the blood's ability to transport oxygen. Cataracts and other eye effects have been reported in humans repeatedly exposed to naphthalene vapor or dust. Ingestion of naphthalene by humans has caused haemolytic anaemia.

Aspiration toxicity

Product:

May be fatal if swallowed and enters airways.

Components:

Distillates (petroleum), hydrotreated light paraffinic:

May be fatal if swallowed and enters airways.

Alkylphenol alkoxylate:

Based on physical properties, not likely to be an aspiration hazard.

Alcohols, C12-15, ethoxylated:
Based on available information, aspiration hazard could not be determined.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:
May be fatal if swallowed and enters airways.

Naphthalene:
Based on physical properties, not likely to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Toxicity to fish	:	Remarks: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). LC50 (*Pimephales promelas* (fathead minnow)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (*Daphnia magna* (Water flea)): > 100 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (*Pseudokirchneriella subcapitata* (green algae)): > 100 mg/l Exposure time: 72 h

Alkylphenol alkoxylate:

Toxicity to fish	:	LC50 (*Lepomis macrochirus* (Bluegill sunfish)): 4.8 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 or Equivalent LC50 (*Oncorhynchus mykiss* (rainbow trout)): 3.7 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 or Equivalent
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (*Daphnia magna* (Water flea)): 10.5 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 or Equivalent
Toxicity to terrestrial organisms	:	Dietary LC50 (*Apis mellifera* (bees)): > 105 micrograms/bee Exposure time: 2 d cContact LD50 (*Apis mellifera* (bees)): > 100 micrograms/bee Exposure time: 2 d

No Observed Effects Level (NOEL) (*Colinus virginianus* (Bobwhite quail)): 2,250 mg/kg

Oral LD50 (*Colinus virginianus* (Bobwhite quail)): > 2,250 mg/kg

Ecotoxicology Assessment

Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.

Alcohols, C12-15, ethoxylated:

Toxicity to fish	:	Remarks: Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested). LC50 (Pimephales promelas (fathead minnow)): 2.7 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0.4 - 0.75 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Algae): < 1 mg/l Exposure time: 96 h
M-Factor (Acute aquatic toxicity)	:	1

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Toxicity to fish	:	Remarks: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested). LC50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 or Equivalent
Toxicity to daphnia and other aquatic invertebrates	:	EL50 (Daphnia magna (Water flea)): 3 - 10 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 or Equivalent
Toxicity to algae/aquatic plants	:	EL50 (Pseudokirchneriella subcapitata (green algae)): 11 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 or Equivalent
Toxicity to terrestrial organisms	:	dietary LC50 (Colinus virginianus (Bobwhite quail)): > 6,500 ppm Exposure time: 5 d Remarks: Based on information for a similar material: oral LD50 (*Colinus virginianus* (Bobwhite quail)): > 2,250 mg/kg

Remarks: Based on information for a similar material:

Naphthalene:

Toxicity to fish	:	Remarks: Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested). LC50 (*Oncorhynchus mykiss* (rainbow trout)): 0.11 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (*Daphnia magna* (Water flea)): 1.6 - 24.1 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae/aquatic plants	:	ErC50 (*Skeletonema costatum* (marine diatom)): 0.4 mg/l Exposure time: 72 h Test Type: Growth rate inhibition
M-Factor (Acute aquatic toxicity)	:	1
Toxicity to fish (Chronic toxicity)	:	NOEC (Other): 0.37 mg/l End point: mortality Exposure time: 40 d Test Type: flow-through
M-Factor (Chronic aquatic toxicity)	:	1

Ecotoxicology Assessment

Chronic aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Biodegradability	:	Result: Not biodegradable Remarks: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. Biodegradation: 31 % Exposure time: 28 d Method: OECD Test Guideline 301F or Equivalent Remarks: 10-day Window: Fail

Alkylphenol alkoxylate:

Biodegradability	:	Result: Not biodegradable Remarks: Biodegradation under aerobic laboratory conditions is below detectable limits (BOD20 or BOD28/ThOD < 2.5%). Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these

results do not necessarily mean that the material is not biodegradable under environmental conditions.

Chemical Oxygen Demand (COD)	:	1.78 kg/kg
ThOD	:	2.35 kg/kg

Alcohols, C12-15, ethoxylated:

Biodegradability	:	Result: Readily biodegradable. Remarks: Material is expected to be readily biodegradable.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Biodegradability	:	Result: Not biodegradable Biodegradation: 39 % Exposure time: 28 d Method: OECD Test Guideline 301D or Equivalent Remarks: 10-day Window: Fail

naphthalene:

Biodegradability	:	Result: Readily biodegradable. Remarks: Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%).
Biochemical Oxygen Demand (BOD)	:	57.0 % Incubation time: 5 d 71.0 % Incubation time: 10 d 71.0 % Incubation time: 20 d
ThOD	:	3.0 kg/kg
Photodegradation	:	Test Type: Half-life (indirect photolysis) Sensitiser: OH radicals Concentration: 1,500,000 1/cm3 Rate constant: 2.16E-11 cm3/s Method: Estimated.

Bioaccumulative potential

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Partition coefficient: n-octanol/water	:	Remarks: For this family of materials: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Alkylphenol alkoxylate:

Partition coefficient: n-octanol/water	:	Remarks: No bioconcentration is expected because of the relatively high water solubility. May foam in water.

Alcohols, C12-15, ethoxylated:

Partition coefficient: n-octanol/water	:	Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Partition coefficient: n-octanol/water	:	log Pow: 2.9 - 6.1 Method: Measured Remarks: Bioconcentration potential is high (BCF > 3,000 or Log Pow between 5 and 7).

Naphthalene:

Bioaccumulation	:	Species: Fish Bioconcentration factor (BCF): 40 - 300 Exposure time: 28 d Method: Measured
Partition coefficient: n-octanol/water	:	log Pow: 3.3 Method: Measured Remarks: Bioconcentration potential is moderate (BCF between 100 and 3,000 or Log Pow between 3 and 5).

Mobility in soil

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Distribution among environmental compartments	:	Remarks: No relevant data found.

Alcohols, C12-15, ethoxylated:

Distribution among environmental compartments	:	Remarks: No relevant data found.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Distribution among environmental compartments	:	Remarks: No relevant data found.

naphthalene:

Distribution among environmental compartments	:	Koc: 240 – 1,300 Method: Measured Remarks: Potential for mobility in soil is medium (Koc between 150 and 500).

Other adverse effects

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Results of PBT and vPvB assessment	:	This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential	:	Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Alkylphenol alkoxylate:

Results of PBT and vPvB assessment	:	This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).
Ozone-Depletion Potential	:	Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Alcohols, C12-15, ethoxylated:

Results of PBT and vPvB assessment	:	This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).
Ozone-Depletion Potential	:	Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Results of PBT and vPvB assessment	:	This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).
Ozone-Depletion Potential	:	Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Naphthalene:

Results of PBT and vPvB assessment	:	This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).
Ozone-Depletion Potential	:	Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

13. DISPOSAL CONSIDERATIONS

Disposal methods: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

Waste handling, treatment and disposal practices must be in compliance with the New Zealand Hazardous Substances (Disposal) Notice 2017. Additional local requirements may be applicable in accordance with planning controls under the Resource Management Act. Regulations concerning waste management may vary in different locations.

14. TRANSPORT INFORMATION

PUBLIC PASSENGER VEHICLE TRANSPORT: To be transported ONLY in the sealed original container. Maximum volume permitted to be transported in a passenger service vehicle: 1 Litre.

International Regulations

UNRTDG

UN number	:	3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Alkylphenol alkoxylate, Solvent naphtha (petroleum), heavy aromatic)
Class	:	9
Subsidiary risk	:	Not applicable
Packing group	:	III
Labels	:	

IATA-DGR

UN/ID No.	:	3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Alkylphenol alkoxylate, Solvent naphtha (petroleum), heavy aromatic)
Class	:	9
Subsidiary risk	:	Not applicable
Packing group	:	
Labels	:	
Packing instruction (cargo aircraft)	:	
Packing instruction (passenger aircraft)	:	Not applicable

IMDG-Code

UN number	:	3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Alkylphenol alkoxylate, Solvent naphtha (petroleum), heavy aromatic) Marine pollutant.
Class	:	9
Subsidiary risk	:	Not applicable
Packing group	:	III
Labels	:	9
EmS Code	:	
Marine pollutant	:	Yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

ADG

UN number	:	3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Alkylphenol alkoxylate, Solvent naphtha (petroleum), heavy aromatic)
Class	:	9
Subsidiary risk	:	Not applicable
Packing group	:	III

Labels :

Hazchem Code: 2X

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

ACVMG APPROVAL NUMBER: Exempt
EPA Approval Code: HSR002503

ADVICE TO PRODUCT USERS REGARDING GHS CONTROLS: Users of this product should make reference to the New Zealand Hazardous Substances and New Organisms Act and Regulations, and the Health and Safety at Work Act for relevant risk management controls. Additional local requirements may be applicable in accordance with planning controls under the Resource Management Act. Refer to Environment Protection Authority for more information http://www.epa.govt.nz

16. OTHER INFORMATION

Revision
Identification Number: 101195427 / A157 / Issue Date: 06.09.2024 / Version: Replaces 11.10.2021
DAS Code: GF-303
Sections amended: 14

Legend

ACGIH	American Conference of Governmental Industrial Hygienists. Threshold Limit Values
Dow IHG	Dow Industrial Hygiene Guideline
NZ OEL	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants
SKIN	Absorbed via skin
STEL	Short term exposure limit
TWA	Time weighted average
WES-STEL	Workplace Exposure Standard - Short-Term Exposure Limit
WES-TWA	Workplace Exposure Standard - Time Weighted average

Full text of other abbreviations

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; ASTM - American Society for the Testing of Materials; ECx - Concentration associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - not otherwise specified; NOEC - Non-Observed Effective Concentration; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; (Q)SAR - (Quantitative) Structure

Activity Relationship; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SDS - Safety Data Sheet; UN - United Nations.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.