WSD Agribusiness Pty Ltd

Chemwatch: **30-0296** Version No: **6.1**

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Chemwatch Hazard Alert Code: 4

Issue Date: **10/12/2021** Print Date: **24/08/2022** L.GHS.AUS.EN

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

| Product name | WSD Aerosol Sheep Dressing |
|----------------------------------|----------------------------|
| Chemical Name | Not Applicable |
| Synonyms | Not Available |
| Proper shipping name | AEROSOLS |
| Chemical formula | Not Applicable |
| Other means of identification | Not Available |

Relevant identified uses of the substance or mixture and uses advised against

| Relevant identified uses | Sheep treatment. |
|--------------------------|------------------|
|--------------------------|------------------|

Details of the supplier of the safety data sheet

| Registered company name | WSD Agribusiness Pty Ltd |
|-------------------------|---|
| Address | 7 Koojan Avenue South Guildford WA 6055 Australia |
| Telephone | +61 8 9321 2888 |
| Fax | +61 8 9479 4088 |
| Website | Not Available |
| Email | contact@wsdagribusiness.com |

Emergency telephone number

| Association / Organisation | CHEMWATCH EMERGENCY RESPONSE |
|-----------------------------------|------------------------------|
| Emergency telephone numbers | +61 1800 951 288 |
| Other emergency telephone numbers | +61 3 9573 3188 |

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 Hazards identification

Classification of the substance or mixture

| Poisons Schedule | S7 |
|--------------------|--|
| Classification [1] | Aerosols Category 1, Reproductive Toxicity Category 1B, Hazardous to the Aquatic Environment Long-Term Hazard Category 3 |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI |

Label elements

| Hazard pictogram(s) | |
|---------------------|--------|
| | |
| Signal word | Danger |

Hazard statement(s)

| AUH044 | Risk of explosion if heated under confinement. | |
|-----------|--|--|
| H222+H229 | Extremely flammable aerosol. Pressurized container: may burst if heated. | |
| H360Df | May damage the unborn child. Suspected of damaging fertility. | |
| H412 | Harmful to aquatic life with long lasting effects. | |

Precautionary statement(s) Prevention

| P273 | Avoid release to the environment. |
|------|--|
| P280 | Wear protective gloves and protective clothing. |
| P251 | Do not pierce or burn, even after use. |
| P211 | Do not spray on an open flame or other ignition source. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P201 | Obtain special instructions before use. |

Precautionary statement(s) Response

| P308+P313 | IF exposed or concerned: Get medical advice/ attention. |
|-----------|---|
| | |

Precautionary statement(s) Storage

| P405 | Store locked up. |
|--|------------------|
| P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. | |

Precautionary statement(s) Disposal

P501

Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|---------------|--|-------------------|
| 84-74-2 | 2 | dibutyl phthalate |
| 2701-86-2 | 0.064 | chlorfenvinphos |
| Not Available | NotSpec | additive(s) |
| Not Available | NotSpec | propellant(s) |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L * EU IOELVs available | |

SECTION 4 First aid measures

Description of first aid measures

| Eye Contact | If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
|--------------|--|
| Skin Contact | If product comes in contact with skin: Contact a Poisons Information Centre or a doctor. DO NOT allow clothing wet with product to remain in contact with skin, strip all contaminated clothing including boots. Quickly wash affected areas vigorously with soap and water. DO NOT give anything by mouth to a patient showing signs of narcosis, i.e. losing consciousness. Give atropine if instructed. |

| | DO NOT delay, get to a doctor or hospital quickly. | | | |
|------------|--|--|--|--|
| Inhalation | If spray mist, vapour are inhaled, remove from contaminated area. Contact a Poisons Information Centre or a doctor at once. Lay patient down in a clean area and strip any clothing wet with spray. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. DO NOT give anything by mouth to a patient showing signs of narcosis, i.e. losing consciousness. Give atropine if instructed. Get to doctor or hospital quickly. | | | |
| Ingestion | If swallowed: Contact a Poisons Information Centre or a doctor at once. If swallowed, activated charcoal may be advised. Give atropine if instructed. REFER FOR MEDICAL ATTENTION WITHOUT DELAY. In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition. If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist. If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS. | | | |

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Firefighting measures

Extinguishing media

SMALL FIRE:

- Water spray, dry chemical or CO2
 LARGE FIRE:
- Water spray or fog.

Special hazards arising from the substrate or mixture

| Fire Incompatibility result |
|-----------------------------|
|-----------------------------|

Advice for firefighters

| Fire Fighting | Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. |
|-----------------------|--|
| Fire/Explosion Hazard | Liquid and vapour are highly flammable. Severe fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Severe explosion hazard, in the form of vapour, when exposed to flame or spark. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition with violent container rupture. Aerosol cans may explode on exposure to naked flames. Rupturing containers may rocket and scatter burning materials. Hazards may not be restricted to pressure effects. May emit acrid, poisonous or corrosive fumes. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon monoxide (CO) phosphorus oxides (POx) other pyrolysis products typical of burning organic material. |

HAZCHEM

Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

HEM Not Applicable

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

| | Environmental hazard - contain spillage. |
|--------------|--|
| | Clean up all spills immediately. |
| | Avoid breathing vapours and contact with skin and eyes. |
| Minor Spills | Wear protective clothing, impervious gloves and safety glasses. |
| Winter Spins | Shut off all possible sources of ignition and increase ventilation. |
| | ▶ Wipe up. |
| | If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated. |
| | Undamaged cans should be gathered and stowed safely. |
| | Environmental hazard - contain spillage. |
| | Clear area of personnel and move upwind. |
| | Alert Fire Brigade and tell them location and nature of hazard. |
| | May be violently or explosively reactive. |
| | Wear breathing apparatus plus protective gloves. |
| | Prevent, by any means available, spillage from entering drains or water courses |
| Major Spills | No smoking, naked lights or ignition sources. |
| | Increase ventilation. |
| | Stop leak if safe to do so. |
| | Water spray or fog may be used to disperse / absorb vapour. |
| | Absorb or cover spill with sand, earth, inert materials or vermiculite. |
| | • If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated. |
| | Undamaged cans should be gathered and stowed safely. |
| | Collect residues and seal in labelled drums for disposal. |

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling • Avoid all personal contact, including inhalation. • Wear protective clothing when risk of exposure occurs. • Use in a well-ventilated area. • Prevent concentration in hollows and sumps. • DO NOT enter confined spaces until atmosphere has been checked. • Avoid smoking, naked lights or ignition sources. • Avoid contact with incompatible materials. • When handling, DO NOT eat, drink or smoke.

| Safe handling | DO NOT incinerate or puncture aerosol cans. |
|-------------------|---|
| | DO NOT spray directly on humans, exposed food or food utensils. |
| | Avoid physical damage to containers. |
| | Always wash hands with soap and water after handling. |
| | Work clothes should be laundered separately. |
| | Use good occupational work practice. |
| | • Observe manufacturer's storage and handling recommendations contained within this SDS. |
| | Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. |
| | Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can |
| | Store in original containers in approved flammable liquid storage area. |
| | • DO NOT store in pits, depressions, basements or areas where vapours may be trapped. |
| Other information | No smoking, naked lights, heat or ignition sources. |
| other mormation | Keep containers securely sealed. Contents under pressure. |
| | Store away from incompatible materials. |
| | Store in a cool, dry, well ventilated area. |
| | Avoid storage at temperatures higher than 40 deg C. |
| | |

| Store in an upright position. Protect containers against physical damage. |
|--|
| Check regularly for spills and leaks. |
| Observe manufacturer's storage and handling recommendations contained within this SDS. |
| |

Conditions for safe storage, including any incompatibilities

| Suitable container | Aerosol dispenser. Check that containers are clearly labelled. | |
|-------------------------|--|--|
| Storage incompatibility | Phthalates: react with strong acids, strong oxidisers, permanganates and nitrates attack some form of plastics Compressed gases may contain a large amount of kinetic energy over and above that potentially available from the energy of reaction produced by the gas in chemical reaction with other substances Avoid reaction with oxidising agents | |

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---------------------------------|-------------------|-------------------|---------|---------------|---------------|---------------|
| Australia Exposure Standards | dibutyl phthalate | Dibutyl phthalate | 5 mg/m3 | Not Available | Not Available | Not Available |

Emergency Limits

| Ingredient | TEEL-1 | TEEL-2 | TEEL-3 |
|-------------------|------------|-------------|-------------|
| dibutyl phthalate | 15 mg/m3 | 1,600 mg/m3 | 9300* mg/m3 |
| chlorfenvinphos | 0.91 mg/m3 | 10 mg/m3 | 500 mg/m3 |

| Ingredient | Original IDLH | Revised IDLH |
|-------------------|---------------|---------------|
| dibutyl phthalate | 4,000 mg/m3 | Not Available |
| chlorfenvinphos | Not Available | Not Available |

Occupational Exposure Banding

| Ingredient | Occupational Exposure Band Rating | Occupational Exposure Band Limit | |
|-----------------|--|----------------------------------|--|
| chlorfenvinphos | ≤ 0.1 ppm | | |
| Notes: | Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health. | | |

MATERIAL DATA

For dibutyl phthalate:

In animal testing the reproductive system has been the prime target. Exposure at or below the TLV has not caused either systemic effects or irritation in man.

Exposure controls

| Appropriate engineering controls | Engineering controls are used to remove a hazard or place a barrier between the engineering controls can be highly effective in protecting workers and will typical provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is don Enclosure and/or isolation of emission source which keeps a selected hazard "pi that strategically "adds" and "removes" air in the work environment. Ventilation or designed properly. The design of a ventilation system must match the particular Employers may need to use multiple types of controls to prevent employee over | Ily be independent of worker interactions to the to reduce the risk. hysically" away from the worker and ventilation can remove or dilute an air contaminant if process and chemical or contaminant in use. exposure. |
|-------------------------------------|--|--|
| | essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. | |
| | Air contaminants generated in the workplace possess varying "escape" velocitie velocities" of fresh circulating air required to effectively remove the contaminant. | · · · |
| | Type of Contaminant: | Speed: |

| | aerosols, (released at low velocity into zone of active generation) | | 0.5-1 m/s |
|-------------------------|--|---|---|
| | direct spray, spray painting in shallow booths, gas discharge (active generation into zone of rapid air motion) | | 1-2.5 m/s (200-500 f/min.) |
| | Within each range the appropriate value depends on: | | |
| | Lower end of the range | | |
| | 1: Room air currents minimal or favourable to capture | 1: Disturbing room air currents | |
| | 2: Contaminants of low toxicity or of nuisance value only. | 2: Contaminants of high toxicity | |
| | 3: Intermittent, low production. | 3: High production, heavy use | |
| | 4: Large hood or large air mass in motion | 4: Small hood-local control only | |
| | Simple theory shows that air velocity falls rapidly with distance generally decreases with the square of distance from the ext extraction point should be adjusted, accordingly, after referent extraction fan, for example, should be a minimum of 1-2 m/s meters distant from the extraction point. Other mechanical c apparatus, make it essential that theoretical air velocities are installed or used. | araction point (in simple cases). Therefore ance to distance from the contaminating so (200-400 f/min.) for extraction of solvent considerations, producing performance de | e the air speed at the ource. The air velocity at the s generated in a tank 2 ficits within the extraction |
| Personal protection | | | |
| Eye and face protection | Safety glasses with side shields Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent] | | |
| Skin protection | See Hand protection below | | |
| Hands/feet protection | Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber | | |
| Body protection | See Other protection below | | |
| Other protection | Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit. | | |

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the: **"Forsberg Clothing Performance Index".** The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

WSD Aerosol Sheep Dressing

| Material | CPI |
|------------------|-----|
| BUTYL | А |
| NATURAL RUBBER | А |
| NATURAL+NEOPRENE | А |
| NEOPRENE | А |
| NEOPRENE/NATURAL | А |
| NITRILE | А |
| PE/EVAL/PE | А |
| PVA | А |
| VITON | A |

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|---------------------------------------|-------------------------|-------------------------|----------------------------|
| up to 10 x ES | A-AUS P2 | - | A-PAPR-AUS / Class 1 P2 |
| up to 50 x ES | - | A-AUS / Class 1 P2 | - |
| up to 100 x ES | - | A-2 P2 | A-PAPR-2 P2 ^ |

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

Cartridge respirators should never be used for emergency ingress or in

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent

areas of unknown vapour concentrations or oxygen content.

- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used
- Positive pressure, full face, air-supplied breathing apparatus should be used for work in enclosed spaces if a leak is suspected or the primary containment is to be opened (e.g. for a cylinder change)
- Air-supplied breathing apparatus is required where release of gas from primary containment is either suspected or demonstrated.

SECTION 9 Physical and chemical properties

use. A qualified practitioner should be consulted.

Information on basic physical and chemical properties

| Appearance | Brown highly flammable liquid with pine oil odour; mixes with water. | | | |
|---|--|--|----------------|--|
| | | | | |
| Physical state | Liquid | Relative density (Water = 1) | Not Available | |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available | |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available | |
| pH (as supplied) | Not Available | Decomposition temperature (°C) | Not Available | |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available | |
| Initial boiling point and boiling range (°C) | -42 (propellant) | Molecular weight (g/mol) | Not Applicable | |
| Flash point (°C) | Not Available | Taste | Not Available | |
| Evaporation rate | Not Available | Explosive properties | Not Available | |
| Flammability | Not Available | Oxidising properties | Not Available | |
| Upper Explosive Limit (%) | 9.6 (propellant) | Surface Tension (dyn/cm or mN/m) | Not Available | |
| Lower Explosive Limit (%) | 1.5 (propellant) | Volatile Component (%vol) | Not Available | |
| Vapour pressure (kPa) | 315-345 @ 25C | Gas group | Not Available | |
| Solubility in water | Miscible | pH as a solution (Not Available%) | Not Available | |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available | |

SECTION 10 Stability and reactivity

| Reactivity | See section 7 |
|-------------------------------------|--|
| Chemical stability | Elevated temperatures. Presence of open flame. Product is considered stable. Hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 Toxicological information

Continued...

WSD Aerosol Sheep Dressing

Information on toxicological effects

| information on toxicologi | |
|---------------------------|--|
| Inhaled | Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system. Common, generalised symptoms associated with toxic gas inhalation include: • central nervous system effects such as depression, headache, confusion, dizziness, progressive stupor, coma and seizures; • respiratory system complications may include acute pulmonary oedema, dyspnoea, stridor, tachypnoea, bronchospasm, wheezing and other reactive airway symptoms, and respiratory arrest; • cardiovascular effects may include cardiovascular collapse, arrhythmias and cardiac arrest; • gastrointestinal effects may also be present and may include mucous membrane irritation, nausea and vomiting (sometimes bloody), and abdominal pain. Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation. WARNING :Intentional misuse by concentrating/inhaling contents may be lethal. |
| Ingestion | Accidental ingestion of the material may be damaging to the health of the individual. Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments Phthalates (aromatic dicarboxylic acid esters), in general, exhibit low toxicity, partly because of poor absorption but mainly as a result of rapid metabolism in which the esters are saponified to phthalic acid (which is rapidly excreted) and the parent alcohol (which is subsequently metabolised). The pathology of these compounds seems to be related to the released alcohol and its biological effects. The rate of absorption of ingested phthalate esters is influenced by the content of dietary fat. Ingested phthalate esters may to a lesser degree be absorbed as the monoester derivatives or in the case of di(2-ethylhexyl)phthalate, as the diester. Cumulative toxicity of the phthalates has been observed on repeated administration. Both di-n-octyl phthalate and di(2-ethylhexyl)phthalate were found to have 22-28 times greater toxicity (based on LD50s) following repeated administration to animals. The liver has been shown to be the target organ affected by the phthalates. In general phthalates have induced liver enlargement; this increase in liver weight has been attributed to rapid cell division (hyperplasia) along with the detachment of cells (hypertrophy). The increase in liver weight caused by phthalates has been found to reverse to normal or even below normal levels on prolonged exposure. Exposure to phthalates, in general, has been found to be associated with a reduction in circulating cholesterol and serum triglyceride levels which accounted for a reduction in liver steroidogenesis. The phthalates also effect carbohydrate metabolism in the liver producing depleted glycogen electron transport inhibitors following interaction with mitochondria. Testicular atrophy produced in rats during feeding studies depends on the length and structure of the alcohol; in general the lower molecular weight esters pro |
| Skin Contact | Skin contact is not thought to produce harmful health effects (as classified under EC Directives using animal models). Systemic harm, however, has been identified following exposure of animals by at least one other route and the material may still produce health damage following entry through wounds, lesions or abrasions. Good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Spray mist may produce discomfort Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. |
| Eye | Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn). Direct contact with the eye may not cause irritation because of the extreme volatility of the gas; however concentrated atmospheres may produce irritation after brief exposures |
| Chronic | There is sufficient evidence to provide a strong presumption that human exposure to the material may result in developmental toxicity, generally on the basis of: - clear results in appropriate animal studies where effects have been observed in the absence of marked maternal toxicity, or at around the same dose levels as other toxic effects but which are not secondary non-specific consequences of the other toxic effects. Exposure to the material may cause concerns for human fertility, generally on the basis that results in animal studies provide sufficient evidence to cause a strong suspicion of impaired fertility in the absence of toxic effects, or evidence of impaired fertility occurring at around the same dose levels as other toxic effects, but which are not a secondary non-specific consequence of other toxic effects. Exposure to the material may cause concerns for human fertility in the absence of toxic effects, or evidence of impaired fertility occurring at around the same dose levels as other toxic effects, but which are not a secondary non-specific consequence of other toxic effects. Exposure to the material may cause concerns for humans owing to possible developmental toxic effects, generally on the basis that results in appropriate animal studies provide strong suspicion of developmental toxicity in the absence of signs of marked maternal toxicity, or at around the same dose levels as other toxic effects but which are not a secondary non-specific |
| | |

| consequence of other toxic effects. |
|---|
| On the basis, primarily, of animal experiments, concern has been expressed by at least one classification body that the material |
| may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists |
| inadequate data for making a satisfactory assessment. |
| Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving |
| organs or biochemical systems. |
| Principal route of occupational exposure to the gas is by inhalation. |
| Oral or intraperitoneal administration of dibutyl phthalate, at high doses relative to the TLV, produced a number of resorptions, |
| neural tube defects, skeletal abnormalities and increased foetal deaths. |

| WSD Aerosol Sheep | TOXICITY | IRRITATION | |
|-------------------|---|--|--|
| Dressing | Not Available | Not Available | |
| | ΤΟΧΙΟΙΤΥ | IRRITATION | |
| | Dermal (rabbit) LD50: >2000 mg/kg ^[2] | Eye: no adverse effect observed (not irritating) ^[1] | |
| dibutyl phthalate | Inhalation(Rat) LC50; >=15.68 mg/l4h ^[1] | Skin: no adverse effect observed (not irritating) ^[1] | |
| | Oral (Rat) LD50; 8000 mg/kg ^[2] | | |
| | ΤΟΧΙΟΙΤΥ | IRRITATION | |
| | dermal (rat) LD50: 26.4 mg/kg ^[2] | Eye (rabbit) - non-irritating * | |
| chlorfenvinphos | Inhalation(Rat) LC50; 0.05 mg/L4h ^[2] | Skin (rabbit) - non-irritating * | |
| | Oral (Rat) LD50; 10 mg/kg ^[2] | | |
| Legend: | 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances | | |

| WSD Aerosol Sheep Dressing | No significant acute toxicological data identified in literature search. |
|-------------------------------|---|
| DIBUTYL PHTHALATE | For dibutyl phthalate (DBP): In studies on rats, DBP is absorbed through the skin, although in <i>in vitro</i> studies human skin has been found to be less permeable than rat skin to this compound. Studies in laboratory animals indicate that DBP is rapidly absorbed from the gastrointestinal tract, distributed primarily to the liver and kidneys of rats and excreted in urine as metabolites following oral or intravenous administration. Following inplation, DBP is metabolised by nonspecific esterasse mainly in the small intestine to yield mon- <i>n</i> -butyl phthalate (MBP) with limited subsequent biochemical oxidation of the alkyl side chain of MBP. MBP. Its bale and resistant to hydrolysis of the second ester group. Accumulation has not been observed in any organ. The profile of effects following exposure to DBP is similar to that of other phthalate esters, which, in susceptible species, can induce hepatomegaly, increased numbers of hepatic peroxisomes, foetotoxicity, teratogenicity and testicular damage. Acute toxicity : The acute toxicity of DBP in rats and mice is low. Signs of acute toxicity in laboratory animals include depression of activity, laboured breathing and lack of coordination. In a case of accidental poisoning of a worker who ingested approximately 10 grams of DBP, recovery was gradual within two weeks and complete after 1 month. On the basis of limited available data in animal species, DBP appears to have little potential to irritate skin or eyes or to induce sensitization. In humans, a few cases of sensitization after exposure to DBP have been reported, although this was not confirmed in controlled studies of larger numbers of individuals reported only in secondary accounts Repeat dose toxicity: In short-term repeated-dose toxicity studies, effects at lowest levels in rats after oral administration for 5 to 21 days loody weight per day or more. Increase in relative liver weight has been observed at doses of 250 mg/kg body weight per day or more. Necrotic hepatic changes in Wistar rats have been reporte |

day. The available studies show that DBP generally induces foetotoxic effects in the absence of maternal toxicity. Available data also indicate that DBP is teratogenic at high doses and that susceptibility to teratogenesis varies with developmental stage and period of administration. In mice, DBP caused dose-dependent increases in the number of resorptions and dead fetuses at oral doses of 400 mg/kg body weight per day or more. Dose-dependent decreases in fetal weights and number of viable litters were also observed in mice at these doses. Adequate carcinogenesis bioassays for DBP have not been conducted. The weight of the available evidence indicates that DBP is not genotoxic.

The material may produce peroxisome proliferation. Peroxisomes are single, membrane limited, cytoplasmic organelles that are found in the cells of animals, plants, fungi and protozoa. Peroxisome proliferators include certain hypolipidaemic drugs, phthalate ester plasticisers, industrial solvents, herbicides, food flavours, leukotriene D4 antagonists and hormones. Numerous studies in rats and mice have demonstrated the hepatocarcinogenic effects of peroxisome proliferators, and these compounds have been unequivocally established as carcinogens. However it is generally conceded that compounds inducing proliferation in rats and mice have little, if any, effect on human liver except at very high doses or extreme conditions of exposure.

Transitional Phthalate Esters: produced from alcohols with straight-chain carbon backbones of C4 to C6. This subcategory also includes a phthalate produced from benzyl alcohol as one ester group with the second ester composed of an alkyl group with a C5 carbon backbone and butyrate group. Phthalate esters containing >10% C4 to C6 molecules were conservatively included in this subcategory. Branched C7 and C8 isomers (di-iso-heptyl, di-iso-octyl and diethylhexyl phthalates) in contrast to linear dihexyl and dioctyl phthalate are members of this family.

Transitional phthalates have varied uses, but are largely used as plasticisers for PVC. Physicochemical properties also vary in that the lower molecular weight transitional phthalates are more water-soluble than higher molecular weight transitional phthalates, but none would be characterised as highly water soluble. Transitional phthalates have lower water solubility than the low molecular weight phthalates and except for butylbenzyl phthalate (BBP), existing data suggest they do not exhibit acute or chronic aquatic toxicity. What distinguishes some of the transitional phthalates from others is their greater mammalian toxicity potential, particularly with regard to reproductive and developmental effects, compared to either the low or high molecular weight phthalate subcategories

Acute Toxicity. The available data on phthalates spanning the carbon range from C4 to C6 indicate that phthalate esters in the transitional subcategory are minimally toxic by acute oral and dermal administration. The oral LD50 value for BBP exceeds 2 g/ kg, and for materials with higher molecular weights, the LD50 values exceed the maximum amounts which can be administered to the animals in a manner consistent with the principles of responsible animal use.

One member of this subcategory, diethylhexyl phthalate (DEHP), has been tested for acute inhalation toxicity. It did not cause an effect at the highest concentration tested. Further, considering the low volatility of these substances, inhalation exposure at toxicologically significant levels is not anticipated.

Repeated Dose Toxicity. Several substances in the C4 to C6 range, including BBP, have been tested for repeated dose toxicity in studies ranging from 3 weeks to 2 years . The principal effects found in these studies were those associated with peroxisome proliferation including liver enlargement and induction of peroxisomal enzymes. As shown in a comparative study of liver effects, the strongest inducers of peroxisome proliferation are diisononyl phthalate (DINP) and di-iso-decyl phthalate (DIDP) with substances of shorter chain length (e.g., BBP) showing much less pronounced effects. Thus it is reasonable to conclude that other members of this subcategory would show effects similar to BBP and less pronounced than DINP or DIDP. It should also be noted that the relevance of these findings to human health is, at best, questionable. It has been shown that these effects are mediated through the peroxisome proliferation-activated receptor alpha (PPARa) and that levels of PPARa are much higher in rodents than they are in humans. Thus one would expect humans to be substantially less responsive than rodents to peroxisome proliferating agents. Empirical evidence that this is true is provided by studies in primates in which repeated administration of DINP had no effects on liver, kidney or testicular parameters.

Several of the substances in the transitional phthalate esters subcategory, however, have been shown to produce testicular atrophy when given to juvenile rats at high levels. Testicular atrophy has been associated with BBP and other substances with C4 to C6 linear carbon chains. However, molecules with fewer than 4 or more than 6 carbons did not produce testicular atrophy in these studies. Although the relevance of these data are uncertain, as the testes is not a target organ for diethylhexyl phthalate (DEHP) in primates, these data do provide one of the distinguishing toxicological characteristics of this subcategory and are one of the underlying reasons supporting the differentiation of phthalate esters on the basis of length of the linear region of the carbon chain.

Genetic Toxicity (Salmonella). A number of the substances in this subcategory including the reference substance BBP has been assessed in the Salmonella and mouse lymphoma assays. All of these substances were inactive in these assays. **Chromosomal Aberrations**. BBP and dihexyl phthalate (DHP) were inactive in micronucleus assays in mice. DEHP was inactive in a cytogenetics assay in rat bone marrow. Diisoheptyl phthalate was inactive in CHO cells, in vitro..

Reproductive toxicity: A series of studies assessed the structure-activity relationship of the effects of phthalate esters on fertility using a continuous breeding protocol. The test substances included in these studies were diethyl-, dipropyl-, dibutyl-, dipentyl-, d-n-hexyl-, di-2(ethylhexyl)-, and di-n-octyl phthalates. The most profound effects were on fertility (i.e., number of females delivering/ number mated) and number of live births. The substance showing the greatest activity was DEHP which produced effects at dietary levels of 0.1 % with a no effect level of 0.01 %. The next most active compounds were di-n-hexyl- and di-n-pentyl phthalate which showed effects in the range of 0.3 to 0.5 %; no effect levels were not experimentally defined. Dipropyl phthalate had an effect on live birth index at 2.5 % but produced no effects at 1.25 %. Diethyl phthalate and di-n-octyl phthalate were inactive at the highest levels tested, 2.5 % and 5.0 %, respectively. These data demonstrated that molecules with linear alkyl chains of 4 to 6 carbons profoundly affect fertility in rodents, with DEHP being the most active. Molecules with longer or shorter side chains are essentially inactive in these assays. These data were also a basis for the separation of phthalates into three categories based on length of side chain.

In addition to these data there are reproductive toxicity studies on BBP and DEHP .

A 2-generation reproductive study was conducted in rats in which BBP was administered via the diet. Parental effects were limited to changes in body weight, weight gain, and increased absolute and relative liver weights. In the F1 parents, treatment with BBP affected mating and fertility indices and sperm number and motility. The F1 male offspring exhibited shortened anogenital distance, delayed acquisition of puberty and retention of nipples and areolae as well as reproductive effects. The NOAEL of the study was reported to be 3750 mg/ kg for reproductive effects. However, for male F1 and F2 offspring, the NOEL for reproductive effects was reported to be 50 mg/ kg based on reductions in anogenital distance. These studies along with previous data provide a good basis to assess the reproductive effects of C4 to C6 phthalate esters. Although several substances

(diheptyl, heptyl nonyl, heptyl undecyl) have ester side chain constituents that predominately fall in the high molecular weight subcategory, these substances are conservatively assumed to exhibit reproductive effects similar to other transitional phthalates. Developmental toxicity: There have been extensive studies of the developmental toxicity of BBP and DEHP. These substances produce structural malformations and also affect male reproductive development. No effect levels are in the range of 50 to 300 mg/ kg bw/ day. There is also an unpublished developmental toxicity study of di-isoheptyl phthalate (DIHP). The results of these studies are broadly consistent with the structure-activity relationships previously described, i.e., that phthalate esters with linear carbon chains of C4 to C6 carbons produce much more profound effects that either shorter or longer molecules. Phthalate esters with >10% C4 to C6 isomers were conservatively placed in the transitional subcategory. This conclusion is supported by developmental test data on "711P*" (which showed structural malformations in rats at 1000 mg/ kg/ day with a NOAEL of 200 mg/ kg/ day ."711P" is an equal composition mixture of six phthalate esters consisting of linear and methylbranched C7, C9, and C11 ester side chains. This test substance is considered by EPA under the following CAS Numbers.: 68515-44-6 (di C7), 68515-45-7 (di C9), 3648-20-2 (di C1 I), 111381-89-6 (C7, C9), 111381-90-9 (C7, C11), and 111381-91-0 (C9, C11). The overall content of C4 to C6 isomers in "71 1P" is approximately 10%, based on the contribution from methylbranched C7 isomers e.g., di C7 (30% C4-C6); C7, C9 (15% C4-C6); and C7, C11 (15 % C4-C6). Test data on 711P were used selectively as read-across data to the C7-containing substances in the mixture, based on the C4 to C6 content of each substance in the mixture.

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No (Effect Level) rat: 2 year 0.05 mg/kg/day . " " " (dog) " " 0.05 mg/kg/day * ADI 0.002 mg/kg b.w. Lachrymation, diarrhoea

| Acute Toxicity | × | Carcinogenicity | × |
|-----------------------------------|---|--------------------------|---|
| Skin Irritation/Corrosion | × | Reproductivity | * |
| Serious Eye Damage/Irritation | × | STOT - Single Exposure | × |
| Respiratory or Skin sensitisation | × | STOT - Repeated Exposure | × |
| Mutagenicity | × | Aspiration Hazard | × |

Legend: X – Data either not available or does not fill the criteria for classification

Data available to make classification

SECTION 12 Ecological information

Toxicity

| | Endpoint | Test Duration (hr) | Species | Value | Source |
|-------------------------------|------------------|--------------------|-------------------------------|------------------|------------------|
| WSD Aerosol Sheep Dressing | Not Available | Not Available | Not Available | Not Available | Not Availabl |
| | Endpoint | Test Duration (hr) | Species | Value | Source |
| | BCF | 1344h | Fish | 3.1-21.2 | 7 |
| | ErC50 | 72h | Algae or other aquatic plants | 1.2mg/l | 1 |
| | NOEC(ECx) | 72h | Algae or other aquatic plants | 0.5mg/l | 1 |
| dibutyl phthalate | EC50 | 72h | Algae or other aquatic plants | 1.2mg/l | 1 |
| | EC50 | 48h | Crustacea | 3.4mg/l | 1 |
| | LC50 | 96h | Fish | 0.28-0.44mg/l | 4 |
| | EC50 | 96h | Algae or other aquatic plants | 0.004-0.2mg/l | 1 |
| | Endpoint | Test Duration (hr) | Species | Value | Source |
| chlorfenvinphos | LC50 | 96h | Fish | 0.32mg/l | Not Available |

On the basis of available evidence concerning either toxicity, persistence, potential to accumulate and or observed environmental fate and behaviour, the material may present a danger, immediate or long-term and /or delayed, to the structure and/ or functioning of natural ecosystems. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

DO NOT discharge into sewer or waterways.

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|-------------------|---------------------------|-----------------------------|
| dibutyl phthalate | LOW (Half-life = 23 days) | LOW (Half-life = 3.08 days) |

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|-----------------|-------------------------|------------------|
| chlorfenvinphos | HIGH | HIGH |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|-------------------|--------------------------|
| dibutyl phthalate | LOW (BCF = 176) |
| chlorfenvinphos | MEDIUM (LogKOW = 4.1458) |

Mobility in soil

| Ingredient | Mobility |
|-------------------|------------------|
| dibutyl phthalate | LOW (KOC = 1460) |
| chlorfenvinphos | LOW (KOC = 591) |

SECTION 13 Disposal considerations

| Waste treatment methods | |
|---------------------------------|---|
| Product / Packaging disposal | DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Consult State Land Waste Management Authority for disposal. Discharge contents of damaged aerosol cans at an approved site. Allow small quantities to evaporate. DO NOT incinerate or puncture aerosol cans. Bury residues and emptied aerosol cans at an approved site. |

SECTION 14 Transport information

Labels Required

| Marine Pollutant | NO |
|------------------|----------------|
| HAZCHEM | Not Applicable |

Land transport (ADG)

| UN number | 1950 | | |
|------------------------------|----------------|--|--|
| UN proper shipping name | AEROSOLS | | |
| Transport hazard class(es) | | .1 Iot Applicable | |
| Packing group | Not Applicable | | |
| Environmental hazard | Not Applicable | Not Applicable | |
| Special precautions for user | | Special provisions63 190 277 327 344 381Limited quantity1000ml | |

Air transport (ICAO-IATA / DGR)

| UN number | 1950 | |
|----------------------------|---------------------|----------------|
| UN proper shipping name | Aerosols, flammable | |
| | ICAO/IATA Class | 2.1 |
| Transport hazard class(es) | ICAO / IATA Subrisk | Not Applicable |
| | ERG Code | 10L |

| | Packing group | Not Applicable | | |
|---|--------------------------------|---|---|--|
| E | Environmental hazard | Not Applicable | | |
| | pecial precautions for user | Special provisions Cargo Only Packing Instructions Cargo Only Maximum Qty / Pack Passenger and Cargo Packing Instructions Passenger and Cargo Maximum Qty / Pack Passenger and Cargo Limited Quantity Packing Instructions | A145 A167 A802 203 150 kg 203 75 kg Y203 | |
| | | Passenger and Cargo Limited Maximum Qty / Pack | 30 kg G | |

Sea transport (IMDG-Code / GGVSee)

| UN number | 1950 | | |
|---------------------------------|--|---|--|
| UN proper shipping name | AEROSOLS | | |
| Transport hazard class(es) | | 2.1 Not Applicable | |
| Packing group | Not Applicable | | |
| Environmental hazard | Not Applicable | | |
| Special precautions for user | EMS Number Special provisions Limited Quantities | F-D, S-U 63 190 277 327 344 381 959 1000 ml | |

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

| Product name | Group |
|-------------------|---------------|
| dibutyl phthalate | Not Available |
| chlorfenvinphos | Not Available |

Transport in bulk in accordance with the ICG Code

| Product name | Ship Type |
|-------------------|---------------|
| dibutyl phthalate | Not Available |
| chlorfenvinphos | Not Available |

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

| dibutyl phthalate is found on the following regulatory lists | |
|--|--|
| Australia Hazardous Chemical Information System (HCIS) - Hazardous | Australian Inventory of Industrial Chemicals (AIIC) |
| Chemicals | Chemical Footprint Project - Chemicals of High Concern List |
| Australia Standard for the Uniform Scheduling of Medicines and Poisons | |
| (SUSMP) - Schedule 10 / Appendix C chlorfenvinphos is found on the following regulatory lists | |
| | Australia Model Work Health and Safety Regulations - Hazardous chemicals (other than lead) requiring health monitoring |

National Inventory Status

| National Inventory | Status | |
|--|--------|--|
| Australia - AIIC / Australia Non-Industrial Use | Yes | |

| National Inventory | Status | | |
|----------------------------------|--|--|--|
| Canada - DSL | No (chlorfenvinphos) | | |
| Canada - NDSL | No (dibutyl phthalate; chlorfenvinphos) | | |
| China - IECSC | Yes | | |
| Europe - EINEC / ELINCS / NLP | Yes | | |
| Japan - ENCS | No (chlorfenvinphos) | | |
| Korea - KECI | Yes | | |
| New Zealand - NZIoC | Yes | | |
| Philippines - PICCS | No (chlorfenvinphos) | | |
| USA - TSCA | No (chlorfenvinphos) | | |
| Taiwan - TCSI | Yes | | |
| Mexico - INSQ | Yes | | |
| Vietnam - NCI | Yes | | |
| Russia - FBEPH | No (chlorfenvinphos) | | |
| Legend: | Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration. | | |

SECTION 16 Other information

| Revision Date | 10/12/2021 |
|---------------|------------|
| Initial Date | 01/11/2009 |

SDS Version Summary

| Version | Date of Update | Sections Updated |
|---------|----------------|---|
| 5.1 | 19/08/2020 | Classification |
| 6.1 | 10/12/2021 | Classification change due to full database hazard calculation/update. |

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit。 IDLH: Immediately Dangerous to Life or Health Concentrations ES: Exposure Standard OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors **BEI: Biological Exposure Index** AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory

KECI: Korea Existing Chemicals Inventory

NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances

TSCA: Toxic Substances Control Act

TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas

NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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