COLORPAK COLOURSTEEL AEROSOL (VARIOUS COLOURS)

Formula Marketing Limited

Chemwatch Hazard Alert Code: **4**

Version No: **2.5**
Safety Data Sheet according to HSNO Regulations

Issue Date: **19/09/2018**
Print Date: **19/09/2018**
S.GHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	COLORPAK COLOURSTEEL AEROSOL (VARIOUS COLOURS)
Synonyms	COLORPAK COLOURSTEEL AEROSOLS- Grey Friars,Ironsand,Desertsand,New Denim Blue,Karaka,Scoria,Titania,Lignite,Pioneer Red,Permanent Green,MistGreen,Terracotta,Sandstone Grey,Rivergum
Proper shipping name	AEROSOLS
Other means of identification	Not Available

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

Relevant identified uses	Application is by spray atomisation from a hand held aerosol pack

Details of the supplier of the safety data sheet

Registered company name	**Formula Marketing Limited**
Address	23 Ross Reid place, East Tamaki, Auckland 2013, New Zealand
Telephone	09 273 3600
Fax	09 271 2304
Website	www.formula.co.nz
Email	sales@formula.co.nz

Emergency telephone number

Association / Organisation	**Not Available**
Emergency telephone numbers	0800 764 766
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification [1]	Aerosols Category 1, Acute Toxicity (Inhalation) Category 5, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Carcinogenicity Category 2, Reproductive Toxicity Category 2, Specific target organ toxicity - repeated exposure Category 2, Acute Vertebrate Hazard Category 3
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI*
Determined by Chemwatch using GHS/HSNO criteria	6.7B, 6.4A, 6.9B, 6.1E (inhalation), 6.3A, 9.3C, 6.8B, 2.1.2A

Label elements

Hazard pictogram(s)	
SIGNAL WORD	**DANGER**

Hazard statement(s)

H222	Extremely flammable aerosol.
H333	May be harmful if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H433	Harmful to terrestrial vertebrates.

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.

Continued...

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.

Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/ attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P312	IF INHALED: Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P314	Get medical advice/attention if you feel unwell.

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 in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
108-88-3*	10-20	toluene
78-93-3*	5-10	methyl ethyl ketone
85-68-7*	1-5	butyl benzyl phthalate
108-94-1*	1-5	cyclohexanone
123-86-4*	1-5	n-butyl acetate
1330-20-7*	1-5	xylene
108-10-1*	1-5	methyl isobutyl ketone
100-41-4*	1-5	ethylbenzene
67-64-1*	40-50	acetone
106-97-8.*	10-20	butane
74-98-6*	1-10	propane
Not Available	Remainder	Other Ingredients not contributing to the classification

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If aerosols come in contact with the eyes: ▸ Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh 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. ▸ Transport to hospital or doctor without delay. ▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. ▸ Generally not applicable.
Skin Contact	If solids or aerosol mists are deposited upon the skin: ▸ Flush skin and hair with running water (and soap if available). ▸ Remove any adhering solids with industrial skin cleansing cream. ▸ **DO NOT** use solvents. ▸ Seek medical attention in the event of irritation. ▸ Generally not applicable.
Inhalation	If aerosols, fumes or combustion products are inhaled: ▸ Remove to fresh air. ▸ Lay patient down. Keep warm and rested. ▸ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▸ If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▸ Transport to hospital, or doctor. ▸ Generally not applicable.
Ingestion	Not considered a normal route of entry. ▸ Generally not applicable.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Continued...

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	▸ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may 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. Slight hazard when exposed to heat, flame and oxidisers.
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. Articles and manufactured articles may constitute a fire hazard where polymers form their outer layers or where combustible packaging remains in place. Certain substances, found throughout their construction, may degrade or become volatile when heated to high temperatures. This may create a secondary hazard.

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

Minor Spills	▸ Clean up all spills immediately. ▸ Avoid breathing vapours and contact with skin and eyes. ▸ Wear protective clothing, impervious gloves and safety glasses. ▸ Shut off all possible sources of ignition and increase ventilation.
Major Spills	▸ Clear area of all unprotected personnel and move upwind. ▸ Alert Emergency Authority and advise them of the location and nature of hazard. ▸ May be violently or explosively reactive. ▸ Wear full body clothing with breathing apparatus. ▸ Remove leaking cylinders to a safe place. ▸ Fit vent pipes. Release pressure under safe, controlled conditions ▸ Burn issuing gas at vent pipes. ▸ **DO NOT** exert excessive pressure on valve; **DO NOT** attempt to operate damaged valve. ▸ 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. ▸ Clean up all spills immediately. ▸ Wear protective clothing, safety glasses, dust mask, gloves. ▸ Secure load if safe to do so. Bundle/collect recoverable product.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

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.
Other information	▸ 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. ▸ No smoking, naked lights, heat or ignition sources. ▸ Keep containers securely sealed. ▸ Store away from incompatible materials.

Conditions for safe storage, including any incompatibilities

Suitable container	Generally packaging as originally supplied with the article or manufactured item is sufficient to protect against physical hazards. If repackaging is required ensure the article is intact and does not show signs of wear. As far as is practicably possible, reuse the original packaging or something providing a similar level of protection to both the article and the handler. ▸ Aerosol dispenser. ▸ Check that containers are clearly labelled.
Storage incompatibility	▸ 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

Continued...

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	toluene	Toluene (Toluol)	50 ppm / 188 mg/m3	Not Available	Not Available	(skin) - Skin absorption
New Zealand Workplace Exposure Standards (WES)	methyl ethyl ketone	MEK (Methyl ethyl ketone, 2-Butanone)	150 ppm / 445 mg/m3	890 mg/m3 / 300 ppm	Not Available	(bio) - Exposure can also be estimated by biological monitoring.
New Zealand Workplace Exposure Standards (WES)	butyl benzyl phthalate	Benzyl butyl phthalate	5 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	cyclohexanone	Cyclohexanone	25 ppm / 100 mg/m3	Not Available	Not Available	(skin) - Skin absorption
New Zealand Workplace Exposure Standards (WES)	n-butyl acetate	n-Butyl acetate	150 ppm / 713 mg/m3	950 mg/m3 / 200 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	xylene	Dimethylbenzene (see Xylene)	50 ppm / 217 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	methyl isobutyl ketone	Methyl isobutyl ketone (Hexone)	50 ppm / 205 mg/m3	307 mg/m3 / 75 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	ethylbenzene	Ethyl benzene	100 ppm / 434 mg/m3	543 mg/m3 / 125 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	acetone	Acetone	500 ppm / 1185 mg/m3	2375 mg/m3 / 1000 ppm	Not Available	(bio) - Exposure can also be estimated by biological monitoring.
New Zealand Workplace Exposure Standards (WES)	butane	Butane	800 ppm / 1900 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	propane	Propane	Not Available	Not Available	Not Available	Simple asphyxiant - may present an explosion hazard

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
toluene	Toluene	Not Available	Not Available	Not Available
methyl ethyl ketone	Butanone, 2-; (Methyl ethyl ketone; MEK)	Not Available	Not Available	Not Available
butyl benzyl phthalate	Phthalic acid, benzyl butyl ester; (Benzyl butyl phthalate)	15 mg/m3	77 mg/m3	460 mg/m3
cyclohexanone	Cyclohexanone; (Ketohexamethylene)	60 ppm	830 ppm	5000 ppm
n-butyl acetate	Butyl acetate, n-	Not Available	Not Available	Not Available
xylene	Xylenes	Not Available	Not Available	Not Available
methyl isobutyl ketone	Methyl isobutyl ketone; (Hexone)	75 ppm	500 ppm	3000 ppm
ethylbenzene	Ethyl benzene	Not Available	Not Available	Not Available
acetone	Acetone	Not Available	Not Available	Not Available
butane	Butane	Not Available	Not Available	Not Available
propane	Propane	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
toluene	500 ppm	Not Available
methyl ethyl ketone	3,000 ppm	Not Available
butyl benzyl phthalate	Not Available	Not Available
cyclohexanone	700 ppm	Not Available
n-butyl acetate	1,700 ppm	Not Available
xylene	900 ppm	Not Available
methyl isobutyl ketone	500 ppm	Not Available
ethylbenzene	800 ppm	Not Available
acetone	2,500 ppm	Not Available
butane	Not Available	1,600 ppm
propane	2,100 ppm	Not Available
Other Ingredients not contributing to the classification	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Articles or manufactured items, in their original condition, generally don't require engineering controls during handling or in normal use. Exceptions may arise following extensive use and subsequent wear, during recycling or disposal operations where substances, found in the article, may be released to the environment. Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:

Continued...

	Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
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. ▸ Close fitting gas tight goggles **DO NOT** wear contact lenses. ▸ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens 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. No special equipment required due to the physical form of the product.
Skin protection	See Hand protection below
Hands/feet protection	▸ No special equipment needed when handling small quantities. ▸ **OTHERWISE:** ▸ For potentially moderate exposures: ▸ Wear general protective gloves, eg. light weight rubber gloves. ▸ For potentially heavy exposures: ▸ Wear chemical protective gloves, eg. PVC. and safety footwear. No special equipment required due to the physical form of the product.
Body protection	See Other protection below
Other protection	▸ The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton. ▸ Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost. BRETHERICK: Handbook of Reactive Chemical Hazards. No special equipment needed when handling small quantities. **OTHERWISE:** ▸ Overalls. ▸ Skin cleansing cream. ▸ Eyewash unit. No special equipment required due to the physical form of the product.

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:
COLORPAK COLOURSTEEL AEROSOL (VARIOUS COLOURS)

Material	CPI
BUTYL	C
NATURAL+NEOPRENE	C
NITRILE	C
PE/EVAL/PE	C
TEFLON	C
VITON	C

* CPI - Chemwatch Performance Index
A: Best Selection
B: Satisfactory; may degrade after 4 hours continuous immersion
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 use. A qualified practitioner should be consulted.

Respiratory protection

Respiratory protection not normally required due to the physical form of the product.
▸ Generally not applicable.
Aerosols, in common with most vapours/ mists, should never be used in confined spaces without adequate ventilation. Aerosols, containing agents designed to enhance or mask smell, have triggered allergic reactions in predisposed individuals.

▸ 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

Information on basic physical and chemical properties

Appearance	AEROSOL

Physical state	article	**Relative density (Water = 1)**	0-76-0.80
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	431
pH (as supplied)	Not Applicable	**Decomposition temperature**	Not Available

Continued...

Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	-81	**Taste**	Not Available
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	HIGHLY FLAMMABLE.	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	10	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	1.5	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water (g/L)	Immiscible	**pH as a solution (1%)**	Not Applicable
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

Information on toxicological effects

Inhaled	The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of the material, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. Inhalation of toxic gases may cause: ▸ Central Nervous System effects including depression, headache, confusion, dizziness, stupor, coma and seizures; ▸ respiratory: acute lung swellings, shortness of breath, wheezing, rapid breathing, other symptoms and respiratory arrest; ▸ heart: collapse, irregular heartbeats and cardiac arrest; ▸ gastrointestinal: irritation, ulcers, nausea and vomiting (may be bloody), and abdominal pain. **WARNING**:Intentional misuse by concentrating/inhaling contents may be lethal.
Ingestion	Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. 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 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	This material can cause eye irritation and damage in some persons. Not considered to be a risk because of the extreme volatility of the gas.
Chronic	Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility. Main route of exposure to the gas in the workplace is by inhalation.

COLORPAK COLOURSTEEL AEROSOL (VARIOUS COLOURS)	**TOXICITY**	**IRRITATION**
	Not Available	Not Available
toluene	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: 12124 mg/kg[2]	Eye (rabbit): 2mg/24h - SEVERE
	Inhalation (Human) TCLo: 100 ppm[2]	Eye (rabbit):0.87 mg - mild
	Inhalation (man) TCLo: 200 ppm[2]	Eye (rabbit):100 mg/30sec - mild
	Inhalation (rat) LC50: >26700 ppm/1h[2]	Skin (rabbit):20 mg/24h-moderate
	Oral (rat) LD50: 636 mg/kg[2]	Skin (rabbit):500 mg - moderate
	Oral (Human)LDLo: 50 mg/kg[2]	
methyl ethyl ketone	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: 20000 mg/kg[2]	Eye (human): 350 ppm -irritant

Continued...

	Dermal (rabbit) LD50: 6480 mg/kg[2]	Eye (rabbit): 80 mg - irritant
	Inhalation (Human) TCLo: 100 ppm/5 m[2]	Skin (rabbit): 402 mg/24 hr - mild
	Inhalation (man) TCLo: 10 mg/m3/6 hr[2]	Skin (rabbit):13.78mg/24 hr open
	Inhalation (Rat)LC50: 50100 mg/m3/8 hr[2]	
	Inhalation (Rat)LD50: 23500 mg/m3/8 hr[2]	
	Oral (rat) LD50: 2737 mg/kg[2]	
butyl benzyl phthalate	**TOXICITY**	**IRRITATION**
	Dermal (mammal) LD50: 13,100 mg/kg**[2]	Not Available
	Dermal (rabbit) LD50: >10, 000 mg/kg*[2]	
	Oral (rat) LD50: 20400 mg/kg* **[2]	
	Oral (rat) LD50: 2330 mg/kg[2]	
cyclohexanone	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: 948 mg/kg[2]	Eye (human): 75 ppm
	Inhalation (Human) TCLo: 75 ppm[2]	Eye (rabbit): 0.25 mg/24h SEVERE
	Inhalation (rat) LC50: 8000 ppm/4h[2]	Eye (rabbit): 4.74 mg SEVERE
	Oral (rat) LD50: 1535 mg/kg[2]	Skin (rabbit): 500 mg(open) mild
n-butyl acetate	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: 3200 mg/kg*[2]	Eye (human): 300 mg
	Inhalation (Human) TCLo: 200 ppm[2]	Eye (rabbit): 20 mg (open)-SEVERE
	Inhalation (Human) TCLo: 200 ppm/4h[2]	Eye (rabbit): 20 mg/24h - moderate
	Inhalation (rat) LC50: 2000 ppm/4H[2]	Skin (rabbit): 500 mg/24h-moderate
	Inhalation (rat) LC50: 390 ppm/4h[2]	
	Intraperitoneal (Guinea pig) LD: 1500 mg/kg[2]	
	Intraperitoneal (Mouse) LD50: 1230 mg/kg[2]	
	Oral (guinea pig) LD50: 4700 mg/kg[2]	
	Oral (Rabbit) LD50: 3200 mg/kg[2]	
	Oral (rat) LD50: 10768 mg/kg[2]	
	Oral (rat) LD50: 13100 mg/kg[2]	
xylene	**TOXICITY**	**IRRITATION**
	Inhalation (Human) TCLo: 200 ppm[2]	Eye (human): 200 ppm irritant
	Inhalation (Human) TCLo: 200 ppm/4h[2]	Eye (rabbit): 5 mg/24h SEVERE
	Inhalation (man) LCLo: 10000 ppm/6h[2]	Eye (rabbit): 87 mg mild
	Inhalation (rat) LC50: 5000 ppm/4h[2]	Skin (rabbit):500 mg/24h moderate
	Inhalation (Guinea Pig)LC: 450 ppm/4h[2]	
	Intraperitoneal (Mouse) LD50: 1548 mg/kg[2]	
	Intraperitoneal (Rat) LD50: 2459 mg/kg[2]	
	Intravenous (Rabbit) LD: 129 mg/kg[2]	
	Oral (mouse) LD50: 2119 mg/kg[2]	
	Oral (rat) LD50: 4300 mg/kg[2]	
	Oral (Human)LD: 50 mg/kg[2]	
	Oral (Human)LDLo: 50 mg/kg[2]	
	Subcutaneous (Rat) LD50: 1700 mg/kg[2]	
methyl isobutyl ketone	**TOXICITY**	**IRRITATION**
	Oral (rat) LD50: 2080 mg/kg[2]	Eye (human): 200 ppm/15m
	Oral (rat) LD50: 2460 mg/kg[2]	Eye (rabbit): 40 mg - SEVERE
		Eye (rabbit): 500 mg/24h - mild
		Skin (rabbit): 500 mg/24h - mild

Continued...

ethylbenzene	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: 17800 mg/kg[2]	Eye (rabbit): 500 mg - SEVERE
	Inhalation (Human) TCLo: 100 ppm/8h[2]	Skin (rabbit): 15 mg/24h mild
	Inhalation (Rat)LC: 4000 ppm/4h[2]	
	Inhalation (Rat)LCLo: 4000 ppm/4h[2]	
	Intraperitoneal (mouse) LD50: 2642 mg/kg[2]	
	Oral (rat) LD50: 3500 mg/kg[2]	
acetone	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: 20000 mg/kg[2]	Eye (human): 500 ppm - irritant
	Inhalation (Human) TCLo: 500 ppm[2]	Eye (rabbit): 20mg/24hr -moderate
	Inhalation (man) TCLo: 10 mg/m3/6 hr[2]	Eye (rabbit): 3.95 mg - SEVERE
	Inhalation (man) TCLo: 12000 ppm/4 hr[2]	Skin (rabbit): 500 mg/24hr - mild
	Inhalation (rat) LC50: 50100 mg/m3/8 hr[2]	Skin (rabbit):395mg (open) - mild
	Oral (man) TDLo: 2857 mg/kg[2]	
	Oral (rat) LD50: 5800 mg/kg[2]	
butane	**TOXICITY**	**IRRITATION**
	Inhalation (rat) LC50: 658000 mg/m3/4h[2]	Not Available
propane	**TOXICITY**	**IRRITATION**
	Inhalation (rat) LC50: 84.684 mg/l15 min[1]	Not Available

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*

toluene	For toluene: Acute toxicity: Humans exposed to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis (sleepiness) and death. When inhaled or swallowed, toluene can cause severe central nervous system depression, and in large doses has a narcotic effect. 60mL has caused death. Death of heart muscle fibres, liver swelling, congestion and bleeding of the lungs and kidney injury were all found on autopsy.
methyl ethyl ketone	Methyl ethyl ketone is considered to have a low order of toxicity; however, methyl ethyl ketone is often used in combination with other solvents and the mixture may have greater toxicity than either solvent alone. Combinations of n-hexane with methyl ethyl ketone, and also methyl n-butyl ketone with methyl ethyl ketone may result in an increased in peripheral neuropathy, a progressive disorder of the nerves of the extremities. Combinations with chloroform also show an increase in toxicity.
butyl benzyl phthalate	The material may produce peroxisome proliferation. Peroxisomes are single, membrane limited organelles in the cytoplasm that are found in the cells of animals, plants, fungi, and protozoa. For benzyl butyl phthalate (BBP): Repeat dose toxicity: Animal studies show that BBP may affect the pancreas, kidney, liver and blood, and the testes at higher doses. Reproductive toxicity and birth defects: Animal studies suggest that BBP may reduce fertility. Developmental toxicity: BBP causes significant developmental effects but only at levels that would be toxic to the mother. Cancer-causing potential: Animal studies show that there is some evidence of cancer-causing potential for BBP. Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis). Reproductive effector in rats.
cyclohexanone	Cyclohexanone irritates the eye and the skin. Signs of CNS depression and weight loss have been noted at higher doses. Other features of toxicity include mottling of the lungs and degenerative changes in the liver and kidney. It is not considered to cause cancers, but it may reversibly reduce fertility.
xylene	Reproductive effector in rats
methyl isobutyl ketone	MIBK is primarily absorbed by the lungs in animals and humans but can be absorbed by the skin, stomach and gut. If inhaled, it may be found in the brain, liver, lung, vitreous fluid, kidney and blood. Oral and respiratory routes of exposure are of minimal effect with changes seen only in the liver and kidney. MIBK does not cause genetic damage or harm the foetus or offspring, and has low toxicity to aquatic organisms.
ethylbenzene	Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed throughout the body, and passed out through urine. It may irritate the skin, eyes and may cause hearing loss if exposed to high doses. Long Term exposure may cause damage to the kidney, liver and lungs, including a tendency to cancer formation, according to animal testing. **NOTE:** Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular DNA. Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded.
acetone	For acetone: The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitizer, but it removes fat from the skin, and it also irritates the eye. Animal testing shows acetone may cause macrocytic anaemia. Studies in humans have shown that exposure to acetone at a level of 2375 mg/cubic metre has not caused neurobehavioural deficits.
propane	No significant acute toxicological data identified in literature search.
toluene & methyl ethyl ketone & cyclohexanone & n-butyl acetate & xylene & methyl isobutyl ketone & ethylbenzene & acetone	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Continued...

methyl ethyl ketone & methyl isobutyl ketone	Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia.
butyl benzyl phthalate & cyclohexanone & xylene	The substance is classified by IARC as Group 3: **NOT** classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.
cyclohexanone & n-butyl acetate & xylene & ethylbenzene	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
methyl isobutyl ketone & ethylbenzene	**WARNING:** This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.

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: ✘ *– Data available but does not fill the criteria for classification*
✔ *– Data available to make classification*
⊘ *– Data Not Available to make classification*

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

COLORPAK COLOURSTEEL AEROSOL (VARIOUS COLOURS)

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Not Available	Not Available	Not Available	Not Available	Not Available

toluene

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	0.0073mg/L	4
EC50	48	Crustacea	3.78mg/L	5
EC50	72	Algae or other aquatic plants	12.5mg/L	4
BCF	24	Algae or other aquatic plants	10mg/L	4
NOEC	168	Crustacea	0.74mg/L	5

methyl ethyl ketone

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	>400mg/L	4
EC50	48	Crustacea	308mg/L	2
EC50	96	Algae or other aquatic plants	>500mg/L	4
NOEC	48	Crustacea	68mg/L	2

butyl benzyl phthalate

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	0.51mg/L	4
EC50	48	Crustacea	0.017mg/L	4
EC50	96	Algae or other aquatic plants	0.1mg/L	4
BCF	78.48	Fish	0.034mg/L	4
NOEC	336	Algae or other aquatic plants	<0.02mg/L	1

cyclohexanone

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	527mg/L	4
EC50	72	Algae or other aquatic plants	32.9mg/L	4
NOEC	24	Fish	ca.5mg/L	1

n-butyl acetate

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	18mg/L	4
EC50	48	Crustacea	=32mg/L	1
EC50	72	Algae or other aquatic plants	=674.7mg/L	1
EC0	192	Algae or other aquatic plants	=21mg/L	1

xylene

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	2.6mg/L	2
EC50	48	Crustacea	>3.4mg/L	2
EC50	72	Algae or other aquatic plants	4.6mg/L	2

Continued...

	NOEC	73	Algae or other aquatic plants	0.44mg/L	2

methyl isobutyl ketone

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	>179mg/L	2
EC50	48	Crustacea	=170mg/L	1
EC50	96	Algae or other aquatic plants	=400mg/L	1
NOEC	504	Crustacea	30mg/L	2

ethylbenzene

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	0.0043mg/L	4
EC50	48	Crustacea	1.184mg/L	4
EC50	96	Algae or other aquatic plants	3.6mg/L	4
NOEC	168	Crustacea	0.96mg/L	5

acetone

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	>100mg/L	4
EC50	48	Crustacea	>100mg/L	4
EC50	96	Algae or other aquatic plants	20.565mg/L	4
NOEC	96	Algae or other aquatic plants	4.950mg/L	4

butane

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Not Available	Not Available	Not Available	Not Available	Not Available

propane

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Not Available	Not Available	Not Available	Not Available	Not Available

Legend: *Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data*

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
toluene	LOW (Half-life = 28 days)	LOW (Half-life = 4.33 days)
methyl ethyl ketone	LOW (Half-life = 14 days)	LOW (Half-life = 26.75 days)
butyl benzyl phthalate	HIGH (Half-life = 180 days)	LOW (Half-life = 2.5 days)
cyclohexanone	LOW	LOW
n-butyl acetate	LOW	LOW
xylene	HIGH (Half-life = 360 days)	LOW (Half-life = 1.83 days)
methyl isobutyl ketone	HIGH (Half-life = 7001 days)	LOW (Half-life = 1.9 days)
ethylbenzene	HIGH (Half-life = 228 days)	LOW (Half-life = 3.57 days)
acetone	LOW (Half-life = 14 days)	MEDIUM (Half-life = 116.25 days)
butane	LOW	LOW
propane	LOW	LOW
Other Ingredients not contributing to the classification	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
toluene	LOW (BCF = 90)
methyl ethyl ketone	LOW (LogKOW = 0.29)
butyl benzyl phthalate	MEDIUM (BCF = 663)
cyclohexanone	LOW (BCF = 2.45)
n-butyl acetate	LOW (BCF = 14)
xylene	MEDIUM (BCF = 740)
methyl isobutyl ketone	LOW (LogKOW = 1.31)
ethylbenzene	LOW (BCF = 79.43)
acetone	LOW (BCF = 0.69)
butane	LOW (LogKOW = 2.89)
propane	LOW (LogKOW = 2.36)

Continued...

Other Ingredients not contributing to the classification	LOW (LogKOW = -1.38)

Mobility in soil

Ingredient	Mobility
toluene	LOW (KOC = 268)
methyl ethyl ketone	MEDIUM (KOC = 3.827)
butyl benzyl phthalate	LOW (KOC = 9359)
cyclohexanone	LOW (KOC = 15.15)
n-butyl acetate	LOW (KOC = 20.86)
methyl isobutyl ketone	LOW (KOC = 10.91)
ethylbenzene	LOW (KOC = 517.8)
acetone	HIGH (KOC = 1.981)
butane	LOW (KOC = 43.79)
propane	LOW (KOC = 23.74)
Other Ingredients not contributing to the classification	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	·Recycle wherever possible or consult manufacturer for recycling options. ·Consult State Land Waste Management Authority for disposal. ▸ 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.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package.
The package must be disposed according to the manufacturer's directions taking into account the material it is made of.
Packages which hazardous content have been appropriately treated and removed may be recycled.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous.

SECTION 14 TRANSPORT INFORMATION

Labels Required

	
Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (UN)

UN number	1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	Class: 2.1 Subrisk: Not Applicable
Packing group	Not Applicable
Environmental hazard	Not Applicable
Special precautions for user	Special provisions: 63; 190; 277; 327; 344; 381 Limited quantity: 1000ml

Air transport (ICAO-IATA / DGR)

UN number	1950
UN proper shipping name	Aerosols, flammable

Continued...

Transport hazard class(es)	ICAO/IATA Class: 2.1 ICAO / IATA Subrisk: Not Applicable ERG Code: 10L
Packing group	Not Applicable
Environmental hazard	Not Applicable
Special precautions for user	Special provisions: A145 A167 A802 Cargo Only Packing Instructions: 203 Cargo Only Maximum Qty / Pack: 150 kg Passenger and Cargo Packing Instructions: 203 Passenger and Cargo Maximum Qty / Pack: 75 kg Passenger and Cargo Limited Quantity Packing Instructions: 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)	IMDG Class: 2.1 IMDG Subrisk: Not Applicable
Packing group	Not Applicable
Environmental hazard	Not Applicable
Special precautions for user	EMS Number: F-D, S-U Special provisions: 63 190 277 327 344 381 959 Limited Quantities: 1000ml

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

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
HSR002517	Aerosols (Flammable, Toxic [6.7]) Group Standard 2017

TOLUENE(108-88-3*) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

METHYL ETHYL KETONE(78-93-3*) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

BUTYL BENZYL PHTHALATE(85-68-7*) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

CYCLOHEXANONE(108-94-1*) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

N-BUTYL ACETATE(123-86-4*) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

XYLENE(1330-20-7*) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Continued...

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

METHYL ISOBUTYL KETONE(108-10-1*) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

ETHYLBENZENE(100-41-4*) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

ACETONE(67-64-1*) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

BUTANE(106-97-8.*) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

PROPANE(74-98-6*) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
2.1.2A	3 000 L (aggregate water capacity)	3 000 L (aggregate water capacity)

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities
2.1.2A	3 000 L aggregate water capacity

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (butane; methyl ethyl ketone; ethylbenzene; n-butyl acetate; methyl isobutyl ketone; propane; acetone; xylene; toluene; cyclohexanone; butyl benzyl phthalate)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	Y
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y
Legend:	*Y = All ingredients are on the inventory* *N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)*

SECTION 16 OTHER INFORMATION

Revision Date	19/09/2018
Initial Date	19/09/2018

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

Continued...

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
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

Powered by AuthorITe, from Chemwatch.