Tesco Silver Birch Tin ZNE0112125AA, Tesco Silver Birch Metallic filled candle ZNE0218138AA, Tesco Silver Birch Scented Tealights ZNE0217132AA, Tesco Silver Birch Filled House ZNE0111701AC, Tesco Silver Birch Gel Inclusion Candle ZNE0111677AC

ZHONGSHAN SOUTH STAR ARTS & CRAFTS MANUFACTURING CO LTD

SDS No.: HKGH0213791701

Issue Date: **13/06/2017**

Safety Data Sheet (Conforms to Regulation (EU) No 2015/830)

Print Date: **13/06/2017**

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

1.1. Product Identifier

Product name	Tesco Silver Birch Tin ZNE0112125AA, Tesco Silver Birch Metallic filled candle ZNE0218138AA, Tesco Silver Birch Scented Tealights ZNE0217132AA, Tesco Silver Birch Filled House ZNE0111701AC, Tesco Silver Birch Gel Inclusion Candle ZNE0111677AC (Contains tetramethyl acetyloctahydronaphthalenes)
Synonyms	Tesco Silver Birch Tin ZNE0112125AA, Tesco Silver Birch Metallic filled candle ZNE0218138AA, Tesco Silver Birch Scented Tealights ZNE0217132AA, Tesco Silver Birch Filled House ZNE0111701AC, Tesco Silver Birch Gel Inclusion Candle ZNE0111677AC
Other means of identification	Not Available

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

Relevant identified uses	Indoor - Candle
Uses advised against	Not Applicable

1.3. Details of the supplier of the safety data sheet

Registered company name	ZHONGSHAN SOUTH STAR ARTS & CRAFTS MANUFACTURING CO LTD
Address	No.7,Shunye Road, Shenwan Village, Banfu Town Zhongshan City, Guangdong, P.R. China
Telephone	(86)0760-28162828
Fax	Not Available
Website	Not Available
Email	service@zhongnamcandle.com / fanny@zhongnamcandle.com

1.4. Emergency telephone number

Association / Organisation	ZHONGSHAN SOUTH STAR ARTS & CRAFTS MANUFACTURING CO LTD
Emergency telephone numbers	(86)0760-28162828 (Operation hours: 09:00-17:00)
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Considered a hazardous mixture according to Reg. (EC) No 1272/2008 and their amendments. Not classified as Dangerous Goods for transport purposes.

Classification according to regulation (EC) No 1272/2008 [CLP]	H317 - Skin Sensitizer Category 1, H412 - Chronic Aquatic Hazard Category 3

Continued...

2.2. Label elements

Hazard pictogram(s)	

SIGNAL WORD	WARNING

Hazard statement(s)

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statement(s) General

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.

Precautionary statement(s) Prevention

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P261	Avoid breathing dust/fume/gas/mist/ vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.

Precautionary statement(s) Response

P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P321	Specific treatment (see instruction on this label)

Precautionary statement(s) Storage
Not Applicable

Precautionary statement(s) Disposal

P501	Dispose of contents/ container to a household waste recycling centre as hazardous waste except for empty containers which can be disposed of in the dustbin. Contact your local council for details.

Supplemental Information
Contains hexyl cinnamal and 4-tert-butylcyclohexyl acetate. May produce an allergic reaction.

2.3. Other hazards

Cumulative effects may result following exposure.
May produce discomfort of the eyes and skin.
Possible respiratory sensitizer.

REACh - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1.Substances
See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1.CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classification according to regulation (EC) No 1272/2008 [CLP]

Continued...

1.64742-51-4 2.265-154-5 3.Not Available 4.01-2119487943-22-XXXX, 01-2119480133-46-XXXX, 01-2119488076-30-XXXX, 01-2119913039-42-XXXX	93-96	Paraffin waxes (petroleum), hydrotreated	Not Classified (substance with a Union workplace exposure limit)
1.Not Available 2.Not Available 3.Not Available 4.Not Available	1-4	Fragrance (AR558423)	Serious eye damage/eye irritation Hazard Category 2 (H319), Aquatic Chronic Hazard Category 2 (H411), Skin corrosion/irritation Hazard Category 2 (H315), Skin Sensitizer Category 1 (H317)
1.54464-57-2 2.259-174-3 3.Not Available 4.Not Available	0.4-1	1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one (tetramethyl acetyloctahydronaphthalenes) (as part of fragrance)	Skin corrosion/irritation Hazard Category 2 (H315), Skin Sensitizer Category 1 (H317), Aquatic Chronic Hazard Category 1 (H410)
1.101-86-0 2.202-983-3 3.Not Available 4.Not Available	0.1-0.2	α-hexylcinnamaldehyde (hexyl cinnamal) (as part of fragrance)	Skin Sensitizer Category 1 (H317), Aquatic Chronic Hazard Category 1 (H410), Aquatic Chronic Hazard Category 2 (H411)
1.32210-23-4 2.250-954-9 3.Not Available 4.01-2119976286-24-XXXX	0.05-0.1	4-tert-butylcyclohexyl acetate (as part of fragrance)	Skin Sensitizer Category 1 (H317)
1.127-91-3 2.204-872-5 3.Not Available 4.01-2119519230-54-XXXX	<0.04	Pin-2(10)-ene (as part of fragrance)	Flammable liquids Hazard Category 3 (H226), Aspiration hazard Hazard Category 1 (H304), Skin corrosion/irritation Hazard Category 2 (H315), Skin Sensitizer Category 1 (H317), Aquatic Acute Hazard Category 1 (H400), Aquatic Chronic Hazard Category 1 (H410) (substance with a Union workplace exposure limit)
1.80-56-8 2.201-291-9 3.Not Available 4.01-2119979519-16-XXXX, 01-2119983230-42-XXXX, 01-2119519223-49-XXXX	<0.04	Pin-2(3)-ene (as part of fragrance)	Flammable liquids Hazard Category 3 (H226), Aspiration hazard Hazard Category 1 (H304), Skin corrosion/irritation Hazard Category 2 (H315), Skin Sensitizer Category 1 (H317) (substance with a Union workplace exposure limit)
1.8006-64-2 2.232-350-7 3.650-002-00-6 4.01-2119553060-53-XXXX, 01-2119502456-45-XXXX	<0.004	Turpentine, oil (as part of fragrance)	Flammable liquids Hazard Category 3 (H226), Acute toxicity (oral) Hazard Category 4 (H302), Aspiration hazard Hazard Category 1 (H304), Acute toxicity (dermal) Hazard Category 4 (H312), Skin corrosion/irritation Hazard Category 2 (H315), Skin Sensitizer Category 1 (H317), Serious eye damage/eye irritation Hazard Category 2 (H319), Acute toxicity (inhal.) Hazard Category 4 (H332), Aquatic Chronic Hazard Category 2 (H411) (substance with a Union workplace exposure limit)
1.64-17-5 2.200-578-6 3.603-002-00-5 4.01-2119457610-43-XXXX	<0.004	ethanol (as part of fragrance)	Flammable liquids Hazard Category 2 (H225), Serious eye damage/eye irritation Hazard Category 2 (H319) (substance with a Union workplace exposure limit)
1.108-88-3 2.203-625-9 3.601-021-00-3 4.01-2119471310-51-XXXX	<0.000004	toluene (as part of fragrance)	Flammable liquids Hazard Category 1 (H224), Aspiration hazard Hazard Category 1 (H304), Skin corrosion/irritation Hazard Category 2 (H315), Specific target organ toxicity — Single exposure Hazard Category 3, Narcosis (H336), Reproductive toxicity Hazard Category 2 (H361), Specific target organ toxicity — Repeated exposure Hazard Category 2 (H373) (substance with a Union workplace exposure limit)

Continued...

SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: ▸ Wash out immediately 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. ▸ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. For THERMAL burns: ▸ Do NOT remove contact lens ▸ Lay victim down, on stretcher if available and pad **BOTH** eyes, make sure dressing does not press on the injured eye by placing thick pads under dressing, above and below the eye. ▸ Seek urgent medical assistance, or transport to hospital.
Skin Contact	If skin contact occurs: ▸ Immediately remove all contaminated clothing, including footwear. ▸ Flush skin and hair with running water (and soap if available). ▸ Seek medical attention in event of irritation. In case of burns: ▸ Immediately apply cold water to burn either by immersion or wrapping with saturated clean cloth. ▸ DO NOT remove or cut away clothing over burnt areas. DO NOT pull away clothing which has adhered to the skin as this can cause further injury. ▸ DO NOT break blister or remove solidified material. ▸ Quickly cover wound with dressing or clean cloth to help prevent infection and to ease pain. ▸ For large burns, sheets, towels or pillow slips are ideal; leave holes for eyes, nose and mouth. ▸ DO NOT apply ointments, oils, butter, etc. to a burn under any circumstances. ▸ Water may be given in small quantities if the person is conscious. ▸ Alcohol is not to be given under any circumstances. ▸ Reassure. ▸ Treat for shock by keeping the person warm and in a lying position. ▸ Seek medical aid and advise medical personnel in advance of the cause and extent of the injury and the estimated time of arrival of the patient. For thermal burns: ▸ Decontaminate area around burn. ▸ Consider the use of cold packs and topical antibiotics. For first-degree burns (affecting top layer of skin) ▸ Hold burned skin under cool (not cold) running water or immerse in cool water until pain subsides. ▸ Use compresses if running water is not available. ▸ Cover with sterile non-adhesive bandage or clean cloth. ▸ Do NOT apply butter or ointments; this may cause infection. ▸ Give over-the counter pain relievers if pain increases or swelling, redness, fever occur. For second-degree burns (affecting top two layers of skin) ▸ Cool the burn by immerse in cold running water for 10-15 minutes. ▸ Use compresses if running water is not available. ▸ Do NOT apply ice as this may lower body temperature and cause further damage. ▸ Do NOT break blisters or apply butter or ointments; this may cause infection. ▸ Protect burn by cover loosely with sterile, nonstick bandage and secure in place with gauze or tape. To prevent shock: (unless the person has a head, neck, or leg injury, or it would cause discomfort): ▸ Lay the person flat. ▸ Elevate feet about 12 inches. ▸ Elevate burn area above heart level, if possible. ▸ Cover the person with coat or blanket. ▸ Seek medical assistance. For third-degree burns Seek immediate medical or emergency assistance. In the mean time: ▸ Protect burn area cover loosely with sterile, nonstick bandage or, for large areas, a sheet or other material that will not leave lint in wound. ▸ Separate burned toes and fingers with dry, sterile dressings. ▸ Do not soak burn in water or apply ointments or butter; this may cause infection. ▸ To prevent shock see above. ▸ For an airway burn, do not place pillow under the person's head when the person is lying down. This can close the airway. ▸ Have a person with a facial burn sit up.

Continued...

	▸ Check pulse and breathing to monitor for shock until emergency help arrives.
Inhalation	▸ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▸ Other measures are usually unnecessary.
Ingestion	▸ Immediately give a glass of water. ▸ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

5.1. Extinguishing media

- Do NOT direct a solid stream of water or foam into burning molten material; this may cause spattering and spread the fire.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

5.2. 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

5.3. Advice for firefighters

Fire Fighting	▸ Alert Fire Brigade and tell them location and nature of hazard. ▸ Wear breathing apparatus plus protective gloves. ▸ Prevent, by any means available, spillage from entering drains or water courses. ▸ Use water delivered as a fine spray to control fire and cool adjacent area.
Fire/Explosion Hazard	▸ Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (circa 70%) - according to the circumstances under which the combustion process occurs, such materials may cause fires and / or dust explosions. ▸ Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions). ▸ Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited - particles exceeding this limit will generally not form flammable dust clouds; once initiated, however, larger particles up to 1400 microns diameter will contribute to the propagation of an explosion. Combustion products include: carbon monoxide (CO) carbon dioxide (CO2) other pyrolysis products typical of burning organic material. **NOTE:** Burns with intense heat. Produces melting, flowing, burning liquid and dense acrid black smoke. **CARE**: Water in contact with hot liquid may cause foaming and a steam explosion with wide scattering of hot oil and possible severe burns. Foaming may cause overflow of containers and may result in possible fire.

Continued...

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

Minor Spills	▸ Clean up all spills immediately. ▸ Avoid breathing dust and contact with skin and eyes. ▸ Wear protective clothing, gloves, safety glasses and dust respirator. ▸ Use dry clean up procedures and avoid generating dust.
Major Spills	Moderate hazard. ▸ CAUTION: Advise personnel in area. ▸ Alert Emergency Services and tell them location and nature of hazard. ▸ Control personal contact by wearing protective clothing.

6.4. Reference to other sections

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

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling	▸ The greatest potential for injury caused by molten materials occurs during purging of machinery (moulders, extruders etc.) ▸ It is essential that workers in the immediate area of the machinery wear eye and skin protection (such as full face, safety glasses, heat resistant gloves, overalls and safety boots) as protection from thermal burns. ▸ Fumes or vapours emitted from hot melted materials, during converting operations, may condense on overhead metal surfaces or exhaust ducts. The condensate may contain substances which are irritating or toxic. Avoid contact of that material with the skin. ▸ Electrostatic discharge may be generated during pumping - this may result in fire. ▸ Ensure electrical continuity by bonding and grounding (earthing) all equipment. ▸ Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). ▸ Avoid splash filling. ▸ 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. ▸ Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions) ▸ Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame. ▸ Establish good housekeeping practices. ▸ Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds.
Fire and explosion protection	See section 5
Other information	▸ Store in original containers. ▸ Keep containers securely sealed. ▸ Store in a cool, dry area protected from environmental extremes. ▸ Store away from incompatible materials and foodstuff containers.

7.2. Conditions for safe storage, including any incompatibilities

Suitable container	▸ Polyethylene or polypropylene container. ▸ Check all containers are clearly labelled and free from leaks.

Continued...

Storage incompatibility	**CARE**: Water in contact with heated material may cause foaming or a steam explosion with possible severe burns from wide scattering of hot material. Resultant overflow of containers may result in fire. ‣ Avoid reaction with oxidising agents

7.3. Specific end use(s)
See section 1.2

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

DERIVED NO EFFECT LEVEL (DNEL)
Not Available

PREDICTED NO EFFECT LEVEL (PNEC)
Not Available

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
UK Workplace Exposure Limits (WELs)	Paraffin waxes (petroleum), hydrotreated	Paraffin wax, fume	2 mg/m3	6 mg/m3	Not Available	Not Available
UK Workplace Exposure Limits (WELs)	Turpentine, oil	Turpentine	566 mg/m3 / 100 ppm	850 mg/m3 / 150 ppm	Not Available	Not Available
UK Workplace Exposure Limits (WELs)	ethanol	Ethanol	1920 mg/m3 / 1000 ppm	Not Available	Not Available	Not Available
UK Workplace Exposure Limits (WELs)	toluene	Toulene	191 mg/m3 / 50 ppm	384 mg/m3 / 100 ppm	Not Available	Sk
European Union (EU) Commission Directive 2006/15/EC establishing a second list of indicative occupational exposure limit values (IOELVs)	toluene	Toluene	192 mg/m3 / 50 ppm	384 mg/m3 / 100 ppm	Not Available	skin
EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)	toluene	Toluene	192 mg/m3 / 50 ppm	384 mg/m3 / 100 ppm	Not Available	Skin

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
Paraffin waxes (petroleum), hydrotreated	Paraffin, n-	6 mg/m3	66 mg/m3	400 mg/m3
Turpentine, oil	Turpentine, (Alpha and beta pinene, 80-56-8)	60 ppm	120 ppm	1,500 ppm
ethanol	Ethyl alcohol; (Ethanol)	Not Available	Not Available	15000 ppm
toluene	Toluene	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
Paraffin waxes (petroleum), hydrotreated	Not Available	Not Available
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Not Available	Not Available
α-hexylcinnamaldehyde	Not Available	Not Available

Continued...

4-tert-butylcyclohexyl acetate	Not Available	Not Available
Pin-2(10)-ene	Not Available	Not Available
Pin-2(3)-ene	Not Available	Not Available
Turpentine, oil	1,500 ppm	800 ppm
ethanol	15,000 ppm	3,300 [LEL] ppm
toluene	2,000 ppm	500 ppm

8.2. Exposure controls

8.2.1. Appropriate engineering controls	For molten materials: Provide mechanical ventilation; in general such ventilation should be provided at compounding/ converting areas and at fabricating/ filling work stations where the material is heated. Local exhaust ventilation should be used over and in the vicinity of machinery involved in handling the molten material. Keep dry!! Processing temperatures may be well above boiling point of water, so wet or damp material may cause a serious steam explosion if used in unvented equipment. 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: 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.
8.2.2. Personal protection	See below
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.
Skin protection	See Hand protection below
Hands/feet protection	**NOTE:** ▸ The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. ▸ Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. ▸ When handling hot materials wear heat resistant, elbow length gloves. ▸ Rubber gloves are not recommended when handling hot objects, materials ▸ Protective gloves eg. Leather gloves or gloves with Leather facing Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present. ▸ polychloroprene. ▸ nitrile rubber. ▸ butyl rubber.
Body protection	See Other protection below
Other protection	▸ When handling hot or molten liquids, wear trousers or overalls outside of boots, to avoid spills entering boots. ▸ Usually handled as molten liquid which requires worker thermal protection and increases hazard of vapour exposure. ▸ CAUTION: Vapours may be irritating. ▸ Overalls. ▸ P.V.C. apron. ▸ Barrier cream.
Thermal hazards	Not Available

Continued...

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:
"Forsberg Clothing Performance Index".
Not available

Respiratory protection

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

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A P1 Air-line*	- -	A PAPR-P1 -
up to 50 x ES	Air-line**	A P2	A PAPR-P2
up to 100 x ES	-	A P3	-
		Air-line*	-
100+ x ES	-	Air-line**	A PAPR-P3

* - Negative pressure demand ** - Continuous flow
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)

For molten materials:
76a-p()

- Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).
- Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- Use approved positive flow mask if significant quantities of dust becomes airborne.
- Try to avoid creating dust conditions.

8.2.3. Environmental exposure controls

See section 12

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Solid (Cream Colour)		
Physical state	Solid	**Relative density (Water = 1)**	Not Available
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available

Continued...

Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	Not Available	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	58-60	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	341-665	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	317	**Taste**	Not Available
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not Applicable	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Applicable
Lower Explosive Limit (%)	Not Available	**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 Available
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available

9.2. Other information

Not Available

SECTION 10 STABILITY AND REACTIVITY

10.1.Reactivity	See section 7.2
10.2. Chemical stability	▸ Unstable in the presence of incompatible materials. ▸ Product is considered stable. ▸ Hazardous polymerisation will not occur.
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Processing for an overly long time or processing at overly high temperatures may cause generation and release of highly irritating vapours, which irritate eyes, nose, throat, causing red itching eyes, coughing, sore throat.
Ingestion	The absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. N-paraffins may be absorbed to a greater extent than isoparaffins or cycloparaffins. Results of extraction and migration tests that have been performed on waxes and wax-bearing products

Continued...

	indicate that hydrocarbon waxes consumed in the diet are unlikely to be absorbed or metabolized in detectable or significant amounts. Hydrocarbon waxes are less likely to be toxic than hydrocarbon oils. The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.
Skin Contact	There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Molten material is capable of causing burns. The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives. The material may accentuate any pre-existing dermatitis condition 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.
Chronic	Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility. Implantation studies in rats show that paraffin oils may cause tumours. As a general rule, the highly refined paraffins are believed to contain less suspect polyaromatic hydrocarbons than less refined grades or waxes derived from napthenic base-stocks. Certain substances, commonly found in perfumes or perfumed products, produce hypersensitivity. Contact allergy to perfumes occurs with a relatively high incidence, only exceeded by nickel allergy. There is no cure for perfume allergy. One sensitized, exposure to even extremely small amounts of the perfume gives rise to eruptions and eczema. Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents.

Tesco Silver Birch Tin ZNE0112125AA, Tesco Silver Birch Metallic filled candle ZNE0218138AA, Tesco Silver Birch Scented Tealights ZNE0217132AA, Tesco Silver Birch Filled House ZNE0111701AC, Tesco Silver Birch Gel Inclusion Candle ZNE0111677AC	TOXICITY	IRRITATION
	Not Available	Not Available
Paraffin waxes (petroleum), hydrotreated	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg	Eye (rabbit): 100 mg/24 hr-mild
	dermal (rat) LD50: >2000 mg/kg	Skin (rabbit): 500 mg/24 hr-mild
	Oral (rat) LD50: >5000 mg/kg	
	Oral (rat) LD50: >5000 mg/kg	
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	TOXICITY	IRRITATION
	Not Available	Not Available
α-hexylcinnamaldehyde	TOXICITY	IRRITATION
	Oral (rat) LD50: 3100 mg/kgd	Skin (g.pig): 100 mg/24h-SEVERE
		Skin (rabbit): 100 mg/24h -SEVERE
		Skin (rabbit): 500 mg/24h - mod
4-tert-butylcyclohexyl acetate	TOXICITY	IRRITATION
	Oral (rat) LD50: 5000 mg/kgd	Skin (rabbit): 500 mg/24h mod
Pin-2(10)-ene	TOXICITY	IRRITATION
	Oral (rabbit) LD50: 4700 mg/kge	Skin (rabbit):500 mg/24h-moderate

Continued...

Pin-2(3)-ene	TOXICITY	IRRITATION
	Oral (rat) LD50: 3700 mg/kgE	Skin (man): 100% - SEVERE
		Skin (rabbit): 500 mg/24h - mod
Turpentine, oil	TOXICITY	IRRITATION
	Oral (rat) LD50: 5760 mg/kg	Eye (human): 175 ppm
ethanol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 17100 mg/kg	Eye (rabbit): 500 mg SEVERE
	Inhalation (rat) LC50: 64000 ppm/4hr	Eye (rabbit):100mg/24hr-moderate
	Oral (rat) LD50: 7060 mg/kge	Skin (rabbit):20 mg/24hr-moderate
		Skin (rabbit):400 mg (open)-mild
toluene	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 12124 mg/kg	Eye (rabbit): 2mg/24h - SEVERE
	Inhalation (rat) LC50: >6675 ppm/1hr	Eye (rabbit):0.87 mg - mild
	Oral (rat) LD50: 636 mg/kge	Eye (rabbit):100 mg/30sec - mild
		Skin (rabbit):20 mg/24h-moderate
		Skin (rabbit):500 mg - moderate

PARAFFIN WAXES (PETROLEUM), HYDROTREATED	"Hydrocarbon wax" describes a group of solid C20 to C36 paraffinic hydrocarbons which are not absorbed in the gastro-intestinal tract and in small quantity will pass through undigested. Refined waxes are used widely in cosmetic surgery over many years and this demonstrates their low toxicity; many guidelines exist for their safe use. However, occasionally there are reports of adverse effects with these products. Deposits under the skin, referred to as “paraffinoma” have been described, but these are not normally associated with other progressive changes. Long-term toxicity studies indicated that petroleum-derived paraffin and microcrystalline waxes are non-toxic and do not cause cancer. Animal studies indicate that normal, branched and cyclic paraffins are absorbed from the gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to be present in mineral oil, n-paraffins may be absorbed to a greater extent than iso- or cyclo-paraffins. The major classes of hydrocarbons are well absorbed into the gastrointestinal tract in various species. In many cases, the hydrophobic hydrocarbons are ingested in association with fats in the diet. The materials included in the Lubricating Base Oils category are related from both process and physical-chemical perspectives; The potential toxicity of a specific distillate base oil is inversely related to the severity or extent of processing the oil has undergone, since: • The adverse effects of these materials are associated with undesirable components, and • The levels of the undesirable components are inversely related to the degree of processing; • Distillate base oils receiving the same degree or extent of processing will have similar toxicities; • The potential toxicity of residual base oils is independent of the degree of processing the oil receives. • The reproductive and developmental toxicity of the distillate base oils is inversely related to the degree of processing. Unrefined & mildly refined distillate base oils contain the highest levels of undesirable components, have the largest variation of hydrocarbon molecules and have shown the highest potential cancer-causing and mutation-causing activities. Highly and severely refined distillate base oils are produced from unrefined and

Continued...

	mildly refined oils by removing or transforming undesirable components. For highly and severely refined distillate base oils: In animal studies, the acute, oral, semilethal dose is >5g/kg body weight and the semilethal dose by skin contact is >2g/kg body weight. The semilethal concentration for inhalation is 2.18 to >4 mg/L. The materials have varied from “non-irritating” to “moderately irritating” when tested for skin and eye irritation. Testing for sensitisation has been negative. Tumorigenic in rats
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No significant acute toxicological data identified in literature search. The substance is an individual isomer of the fragrance ingredient OTNE [predominant isomer: 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1- one; synonyms - tetramethylacetyloctahydronaphthalene, Iso-E Super; other isomers: 1-(1,2,3,4,5,6,7,8-octahydro2,3,8,8,-tetramethyl-2-naphthyl)ethan-1-one, and 1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-acetonaphthalenone]. A synthetic terpenoid considered to be a petroleum-derived aroma chemical No data were available regarding chemical disposition, metabolism, or toxicokinetics; acute, short term, subchronic, or chronic toxicity; synergistic or antagonistic activity; reproductive or teratological effects; carcinogenicity; genotoxicity; or immunotoxicity of OTNE Several compounds were considered as structural analogues of OTNE. Data are provided for the tetralin derivatives AHTN (CAS RN: 21145-77-7; Tonalide, 1-(5,6,7,8-tetrahydro-3,5,5,6,8,8 hexamethyl-2-naphthalenyl)ethanone) and AETT, (*CAS RN: 88-29-9; Versalide, 1-(3-ethyl-5,6,7,8-tetrahydro-5,5,8,8 tetramethyl-2-naphthalenyl)ethanone) which are also polycyclic synthetic musks. Both compounds have been detected in human adipose tissue and human milk. The alkyl cyclic ketone (ACK) fragrance ingredients are a diverse group of structures with similar metabolic and toxicity profiles. ACK fragrance materials have low acute toxicity. Repeated exposure causes some adverse effects in biochemical tests and blood cell counts. They are not considered to be irritating to the skin of humans.
A-HEXYLCINNAMALDEHYDE	Fragrance allergens act as haptens, low molecular weight chemicals that cause an immune response only when attached to a carrier protein. However, not all sensitizing fragrance chemicals are directly reactive, but require previous activation. A prehapten is a chemical that itself causes little or no sensitization, but is transformed into a hapten in the skin (bioactivation), usually via enzyme catalysis. It is not always possible to know whether a particular allergen that is not directly reactive acts as a prehapten or a prohapten , or both. Animal testing suggests that the toxicity through swallowing cinnamyl aldehyde derivatives is very low. The potential for toxicity through skin exposure is similarly low. Cinnamaldehyde and its alkyl-substituted derivatives do not directly cause mutations or genetic damage. However, animal testing suggests that they may result in poor development of the skull and kidney in the foetus. These substances are generally regarded as safe. Cinnamyl derivatives are natural components of certain foods, and are found in greater amounts there than in flavouring substances. They are rapidly absorbed, broken down and eliminated in the human body, and do not have significant potential to cause genetic toxicity and mutations.
4-TERT-BUTYLCYCLOHEXYL ACETATE	There are no safety concerns regarding cyclic acetates under the present declared levels of use, for the reasons outlined below. Cyclic acetates have low acute toxicity. Cyclic acetates and cyclic alcohols also have low whole-body toxicity, after repeated application to skin. At concentrations encountered in current use, minimal, if any, skin irritation occurs.
TURPENTINE, OIL	d-Limonene is readily absorbed by inhalation and swallowing. Absorption through the skin is reported to the lower than by inhalation. It is rapidly distributed to different tissues in the body, readily metabolized and eliminated, primary through the urine. Limonene shows low acute toxicity by all three routes in animals.
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.

Continued...

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one & A-HEXYLCINNAMALDEHYDE & PIN-2(10)-ENE & PIN-2(3)-ENE & TURPENTINE, OIL	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions.
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one & A-HEXYLCINNAMALDEHYDE & PIN-2(10)-ENE & PIN-2(3)-ENE & TURPENTINE, OIL	Adverse reactions to fragrances in perfumes and fragranced cosmetic products include allergic contact dermatitis, irritant contact dermatitis, sensitivity to light, immediate contact reactions, and pigmented contact dermatitis. Airborne and connubial contact dermatitis occurs. Contact allergy is a lifelong condition, so symptoms may occur on re-exposure. Allergic contact dermatitis can be severe and widespread, with significant impairment of quality of life and potential consequences for fitness for work.
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one & PIN-2(10)-ENE & PIN-2(3)-ENE & TURPENTINE, OIL	Fragrance allergens act as haptens, which are small molecules that cause an immune reaction only when attached to a carrier protein. However, not all sensitizing fragrance chemicals are directly reactive, but some require previous activation. A prehapten is a chemical that itself causes little or no sensitization, but it is transformed into a hapten outside the skin by a chemical reaction (oxidation in air or reaction with light) without the requirement of an enzyme. For prehaptens, it is possible to prevent activation outside the body to a certain extent by different measures, for example, prevention of air exposure during handling and storage of the ingredients and the final product, and by the addition of suitable antioxidants.
A-HEXYLCINNAMALDEHYDE & PIN-2(3)-ENE	The material may cause severe 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. Repeated exposures may produce severe ulceration.
4-TERT-BUTYLCYCLOHEXYL ACETATE & PIN-2(10)-ENE & PIN-2(3)-ENE	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.
4-TERT-BUTYLCYCLOHEXYL ACETATE & ETHANOL & TOLUENE	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.
PIN-2(10)-ENE & PIN-2(3)-ENE & TURPENTINE, OIL	Bicyclic terpenes are very low in acute toxicity. However, repeated dosing may have deleterious effects on the liver and kidney. Members of this category show no significant reproductive or developmental toxicity and may have a little, if any, potential to alter genetic material.
PIN-2(10)-ENE & PIN-2(3)-ENE	A member or analogue of a group of of aliphatic and aromatic terpene hydrocarbons generally considered as safe (GRAS) based, in part, on their self-limiting properties as flavouring substances in food; their rapid absorption, metabolic detoxication, and excretion in humans and other animals; their low level of flavour use; the wide margins of safety between the conservative estimates of intake and the no-observed-adverse effect levels determined from subchronic and chronic studies and the lack of significant genotoxic potential. Consumers are exposed to aliphatic and terpene hydrocarbons from a variety of ingested and environmental source. Quantitative natural occurrence data for 17 aliphatic terpene hydrocarbons in the group demonstrate that their consumption occurs predominantly as natural components of traditional food . Oral LD50 values have been reported for 16 of the 17 substances in this group.

Acute Toxicity	⊘	**Carcinogenicity**	⊘
Skin Irritation/Corrosion	⊘	**Reproductivity**	⊘
Serious Eye Damage/Irritation	⊘	**STOT - Single Exposure**	⊘
Respiratory or Skin sensitisation	✔	**STOT - Repeated Exposure**	

Continued...

Mutagenicity		Aspiration Hazard	

Legend: ✔ *– No data available for the final mixture, but the level of individual ingredients are considered in the overall property.*
⊘ *– Data Not Available to make classification*

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

Tesco Silver Birch Tin ZNE0112125AA, Tesco Silver Birch Metallic filled candle ZNE0218138AA, Tesco Silver Birch Scented Tealights ZNE0217132AA, Tesco Silver Birch Filled House ZNE0111701AC, Tesco Silver Birch Gel Inclusion Candle ZNE0111677AC

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

Paraffin waxes (petroleum), hydrotreated

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

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

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

α-hexylcinnamaldehyde

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	2.360mg/L	3
EC50	96	Algae or other aquatic plants	0.343mg/L	3

4-tert-butylcyclohexyl acetate

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	1.523mg/L	3
EC50	48	Crustacea	5.3mg/L	2
EC50	96	Algae or other aquatic plants	0.133mg/L	3
EC50	24	Crustacea	=9.6mg/L	1

Pin-2(10)-ene

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	0.445mg/L	3
EC50	96	Algae or other aquatic plants	0.563mg/L	3
EC50	384	Crustacea	0.113mg/L	3

Pin-2(3)-ene

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	0.28mg/L	2
EC50	96	Algae or other aquatic plants	0.663mg/L	3
EC50	384	Crustacea	0.129mg/L	3
NOEC	96	Crustacea	=0.18mg/L	1

Turpentine, oil

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	=0.01mg/L	1

ethanol

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
LC50	96	Fish	42mg/L	4
EC50	48	Crustacea	2mg/L	4
EC50	96	Algae or other aquatic plants	17.921mg/L	4

Continued...

	NOEC	2016	Fish	0.000375mg/L	4

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
EC50	384	Crustacea	1.533mg/L	3
NOEC	168	Crustacea	0.74mg/L	5

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.
Wastes resulting from use of the product must be disposed of on site or at approved waste sites.
Drinking Water Standards: hydrocarbon total: 10 ug/l (UK max.).
DO NOT discharge into sewer or waterways.

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
α-hexylcinnamaldehyde	LOW	LOW
4-tert-butylcyclohexyl acetate	HIGH	HIGH
Pin-2(10)-ene	HIGH	HIGH
Pin-2(3)-ene	HIGH	HIGH
ethanol	LOW (Half-life = 2.17 days)	LOW (Half-life = 5.08 days)
toluene	LOW (Half-life = 28 days)	LOW (Half-life = 4.33 days)

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
α-hexylcinnamaldehyde	HIGH (LogKOW = 4.8208)
4-tert-butylcyclohexyl acetate	MEDIUM (LogKOW = 4.4225)
Pin-2(10)-ene	MEDIUM (LogKOW = 4.16)
Pin-2(3)-ene	MEDIUM (LogKOW = 4.44)
ethanol	LOW (LogKOW = -0.31)
toluene	LOW (BCF = 90)

12.4. Mobility in soil

Ingredient	Mobility
α-hexylcinnamaldehyde	LOW (KOC = 4025)
4-tert-butylcyclohexyl acetate	LOW (KOC = 517.4)
Pin-2(10)-ene	LOW (KOC = 1204)

Continued...

Pin-2(3)-ene	LOW (KOC = 1204)
ethanol	HIGH (KOC = 1)
toluene	LOW (KOC = 268)

12.5.Results of PBT and vPvB assessment

	P	B	T
Relevant available data	Not Available	Not Available	Not Available
PBT Criteria fulfilled?	Not Available	Not Available	Not Available

12.6. Other adverse effects
No data available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product / Packaging disposal	▸ Containers may still present a chemical hazard/ danger when empty. ▸ Return to supplier for reuse/ recycling if possible. Otherwise: ▸ If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. ▸ Where possible retain label warnings and SDS and observe all notices pertaining to the product. ▸ 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.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1.UN number	Not Applicable
14.2.UN proper shipping name	Not Applicable
14.3. Transport hazard class(es)	Class: Not Applicable Subrisk: Not Applicable
14.4.Packing group	Not Applicable
14.5.Environmental hazard	Not Applicable
14.6. Special precautions for user	Hazard identification (Kemler): Not Applicable Classification code: Not Applicable Hazard Label: Not Applicable Special provisions: Not Applicable

Continued...

	Limited quantity	Not Applicable

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1.UN number	Not Applicable	
14.2.UN proper shipping name	Not Applicable	
14.3. Transport hazard class(es)	ICAO/IATA Class	Not Applicable
	ICAO / IATA Subrisk	Not Applicable
	ERG Code	Not Applicable
14.4.Packing group	Not Applicable	
14.5.Environmental hazard	Not Applicable	
14.6. Special precautions for user	Special provisions	Not Applicable
	Cargo Only Packing Instructions	Not Applicable
	Cargo Only Maximum Qty / Pack	Not Applicable
	Passenger and Cargo Packing Instructions	Not Applicable
	Passenger and Cargo Maximum Qty / Pack	Not Applicable
	Passenger and Cargo Limited Quantity Packing Instructions	Not Applicable
	Passenger and Cargo Limited Maximum Qty / Pack	Not Applicable

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1.UN number	Not Applicable	
14.2.UN proper shipping name	Not Applicable	
14.3. Transport hazard class(es)	IMDG Class	Not Applicable
	IMDG Subrisk	Not Applicable
14.4.Packing group	Not Applicable	
14.5.Environmental hazard	Not Applicable	
14.6. Special precautions for user	EMS Number	Not Applicable
	Special provisions	Not Applicable
	Limited Quantities	Not Applicable

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1.UN number	Not Applicable	
14.2.UN proper shipping name	Not Applicable	
14.3. Transport hazard class(es)	Not Applicable	Not Applicable
14.4.Packing group	Not Applicable	
14.5.Environmental hazard	Not Applicable	
14.6. Special precautions for user	Classification code	Not Applicable
	Special provisions	Not Applicable

Continued...

Limited quantity	Not Applicable
Equipment required	Not Applicable
Fire cones number	Not Applicable

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

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

PARAFFIN WAXES (PETROLEUM), HYDROTREATED(64742-51-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English)
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)
UK Workplace Exposure Limits (WELs)

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one(54464-57-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English)
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

A-HEXYLCINNAMALDEHYDE(101-86-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English)
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)
European Trade Union Confederation (ETUC) Priority List for REACH Authorisation

4-TERT-BUTYLCYCLOHEXYL ACETATE(32210-23-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English)
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

PIN-2(10)-ENE(127-91-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU European Chemicals Agency (ECHA) Community Rolling Action Plan (CoRAP) List of Substances
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)
European Customs Inventory of Chemical Substances ECICS (English)

PIN-2(3)-ENE(80-56-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English)
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)
European Trade Union Confederation (ETUC) Priority List for REACH Authorisation

TURPENTINE, OIL(8006-64-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31
European Customs Inventory of Chemical Substances ECICS (English)
European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI
European Trade Union Confederation (ETUC) Priority List for REACH Authorisation
UK Workplace Exposure Limits (WELs)
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

ETHANOL(64-17-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31
European Customs Inventory of Chemical Substances ECICS (English)
European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)
UK Workplace Exposure Limits (WELs)

Continued...

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

EU Consolidated List of Indicative Occupational Exposure Limit Values (IOELVs)	European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31
EU European Chemicals Agency (ECHA) Community Rolling Action Plan (CoRAP) List of Substances	European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances (updated by ATP: 31) - Reprotoxic Substances
EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	European Union (EU) Commission Directive 2006/15/EC establishing a second list of indicative occupational exposure limit values (IOELVs) (Spanish)
European Customs Inventory of Chemical Substances ECICS (English)	European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI
European Trade Union Confederation (ETUC) Priority List for REACH Authorisation	International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)	UK Workplace Exposure Limits (WELs)

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Commission Regulation (EU) 2015/830, Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 and their amendments

15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

SECTION 16 OTHER INFORMATION

Full text Risk and Hazard codes

H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Other information

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.

End of SDS