

Thermon EFS - 1

Thermon (Thermon Australia)

Chemwatch Hazard Alert Code: 2

Chemwatch: 7135407

Issue Date: 01/01/2013

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Print Date: 28/10/2014

Safety Data Sheet according to WHS and ADG requirements

Initial Date: Not Available

S.GHS.AUS.EN

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

Product Identifier

Product name	Thermon EFS - 1
Chemical Name	Not Applicable
Synonyms	EFS - 1
Proper shipping name	Not Applicable
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

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

Relevant identified uses	Fatty acid amides are nonionic substances which have a strong tendency to reduce friction on various surfaces by forming a layer on surfaces. This coating action may be attributed to their hydrophobic character and strong hydrogen bonding. Primary, secondary, and bisamides are widely used as lubricating or slip agents and alkanolamides. Their ethoxylated counterparts are commonly used as surfactants in personal care and detergent applications. Heat transfer compound.
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Details of the manufacturer/importer

Registered company name	Thermon (Thermon Australia)	Thermon (Thermon Manufacturing Company)	Thermon
Address	30 London Drive Bayswater 3153 Victoria Australia	100 Thermon Drive San Marcos 78666 TX United States	10 Fitzwilliam Drive Torbay 1310 Auckland New Zealand
Telephone	+61 3 9762 6900	+1 512 396 5801	Not Available
Fax	+61 3 9762 9519	+1 512 396 3627	Not Available
Website	Not Available	Not Available	Not Available
Email	Not Available	robert.fore@thermon.com	Not Available

Emergency telephone number

Association / Organisation	Not Available	Not Available	Not Available
Emergency telephone numbers	Not Available	Not Available	Not Available
Other emergency telephone numbers	Not Available	Not Available	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

NON-HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability	0	
Toxicity	0	
Body Contact	2	
Reactivity	1	
Chronic	2	

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme

Poisons Schedule	Not Applicable
GHS Classification ^[1]	Acute Aquatic Hazard Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

GHS label elements	Not Applicable
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SIGNAL WORD	NOT APPLICABLE
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Hazard statement(s)

H402	Harmful to aquatic life
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Precautionary statement(s): Prevention

P273	Avoid release to the environment.
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Precautionary statement(s): Response

Not Applicable

Precautionary statement(s): Storage

Not Applicable

Precautionary statement(s): Disposal

P501	Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
7782-42-5	30-60	graphite
24937-78-8	10-30	ethylene/ vinyl acetate copolymer
13983-17-0	1-10	wollastonite
110-30-5	1-10	N,N'-1,2-ethanediybisoctadecanamide
64742-57-0	1-10	residual oils, petroleum, hydrotreated
26813-14-9	1-10	1,3-pentadiene/ 2-methyl-2-butene copolymer
27676-62-6	<1	tris(3,5-di-tert-butyl-4-hydroxybenzyl) isocyanurate

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ 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.
Skin Contact	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ 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. <p>In case of burns:</p> <ul style="list-style-type: none"> ▶ Immediately apply cold water to burn either by immersion or wrapping with saturated clean cloth.

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	<ul style="list-style-type: none"> ▶ 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.
Inhalation	<ul style="list-style-type: none"> ▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▶ Other measures are usually unnecessary.
Ingestion	<ul style="list-style-type: none"> ▶ Immediately give a glass of water. ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

	<ul style="list-style-type: none"> ▶ There is no restriction on the type of extinguisher which may be used. ▶ Use extinguishing media suitable for surrounding area.
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Special hazards arising from the substrate or mixture

Fire Incompatibility	<ul style="list-style-type: none"> ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Advice for firefighters

Fire Fighting	<ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear breathing apparatus plus protective gloves in the event of a fire. ▶ Prevent, by any means available, spillage from entering drains or water courses. ▶ Use fire fighting procedures suitable for surrounding area.
Fire/Explosion Hazard	<ul style="list-style-type: none"> ▶ The material is not readily combustible under normal conditions. ▶ However, it will break down under fire conditions and the organic component may burn. ▶ Not considered to be a significant fire risk. ▶ Heat may cause expansion or decomposition with violent rupture of containers.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	<ul style="list-style-type: none"> ▶ Clean up waste regularly and abnormal 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	<p>Minor hazard.</p> <ul style="list-style-type: none"> ▶ Clear area of personnel. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Control personal contact with the substance, by using protective equipment as required.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	<p>NOTE:</p> <ul style="list-style-type: none"> ▶ Wet, activated carbon removes oxygen from the air thus producing a severe hazard to workers inside carbon vessels and in enclosed or confined spaces where activated carbons might accumulate. ▶ Before entry to such areas, sampling and test procedures for low oxygen levels should be undertaken; control conditions should be established to ensure the availability of adequate oxygen supply. ▶ Avoid all personal contact, including inhalation. ▶ Wear protective clothing when risk of exposure occurs.
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Other information	Carbon and charcoal may be stabilised for storage and transport, without moistening, by treatment with hot air at 50 deg. C.. Use of oxygen-impermeable bags to limit oxygen and moisture uptake has been proposed. Surface contamination with oxygenated volatiles may generate a heat of reaction (spontaneous heating).
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Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ▶ Polyethylene or polypropylene container. ▶ Packing as recommended by manufacturer. ▶ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	<ul style="list-style-type: none"> ▶ Avoid overheating in processing as this causes decomposition and degradation of polymer. This may start at temperatures above 90 deg.C, and becomes more rapid at higher temperatures with generation of highly irritating acetic acid vapour. <p>For carbon powders:</p> <ul style="list-style-type: none"> ▶ Avoid oxidising agents, reducing agents. ▶ Reaction with finely divided metals, bromates, chlorates, chloramine monoxide, dichlorine oxide, iodates, metal nitrates, oxygen difluoride, peroxyformic acid, peroxyfuroic acid and trioxigen difluoride may result in an exotherm with ignition or explosion.

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	graphite	Graphite (all forms except fibres) (respirable dust)(g)(natural & synthetic)	3 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	residual oils, petroleum, hydrotreated	Oil mist, refined mineral	5 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
Thermon EFS - 1	Not Available	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
graphite	N.E. mg/m3 / N.E. ppm	1,250 mg/m3
ethylene/ vinyl acetate copolymer	Not Available	Not Available
wollastonite	Not Available	Not Available
N,N'-1,2-ethanediybisoctadecanamide	Not Available	Not Available
residual oils, petroleum, hydrotreated	Not Available	Not Available
1,3-pentadiene/ 2-methyl-2-butene copolymer	Not Available	Not Available
tris(3,5-di-tert-butyl-4-hydroxybenzyl) isocyanurate	Not Available	Not Available

Exposure controls

Appropriate engineering controls	<p>Exhaust ventilation should be designed to prevent accumulation and recirculation in the workplace and safely remove carbon black from the air.</p> <p>Note: Wet, activated carbon removes oxygen from the air and thus presents a severe hazard to workers inside carbon vessels and enclosed or confined spaces. Before entering such areas sampling and test procedures for low oxygen levels should be undertaken and control conditions set up to ensure ample oxygen availability.[Linde]</p> <p>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.</p>
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Personal protection	
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Eye and face protection	<ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ Wear chemical protective gloves, e.g. PVC. ▶ Wear safety footwear or safety gumboots, e.g. Rubber ▶ 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
Body protection	See Other protection below
Other protection	<ul style="list-style-type: none"> ▶ 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.
Thermal hazards	Not Available

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:

Thermon EFS - 1 Not Available

Material	CPI
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* 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

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

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

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

^ - Full-face

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	<p>Fatty acid amides (FAAs) comprise a family of neutral lipids that is related to other classes of N-acyl amines, such as N-acyl amino acids, N-acylethanolamines, and more complicated species like sphingomyelins and ceramides.</p> <p>Commercial FAAs generally consist of a fatty acid, usually derived from coconut oil, which is linked to an amide group by a C-N bond. The amide may either be monoethanolamide (MEA), diethanolamide (DEA), or monoisopropanolamide (MIPA). Representative structures of FAA are indicated below.</p>
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Physical state	Non Slump Paste	Relative density (Water = 1)	1.22
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
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 Applicable
Flash point (°C)	Not Available	Taste	Not Available

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Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	0
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	Product is considered stable and 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	There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. <ul style="list-style-type: none"> ▸ Usually handled as molten liquid which requires worker thermal protection and increases hazard of vapour exposure. ▸ CAUTION: Vapours may be irritating.
Ingestion	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. 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	There is some evidence to suggest that this material can cause eye irritation and damage in some persons.
Chronic	There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Red blood cells and rabbit alveolar macrophages exposed to calcium silicate insulation materials in vitro showed haemolysis in one study but not in another. Both studies showed the substance to be more cytotoxic than titanium dioxide but less toxic than asbestos.

Thermon EFS - 1	TOXICITY	IRRITATION
	Not Available	Not Available
graphite	TOXICITY	IRRITATION
	Not Available	Not Available
ethylene/ vinyl acetate copolymer	TOXICITY	IRRITATION
	Not Available	Not Available
wollastonite	TOXICITY	IRRITATION
	Not Available	Not Available
N,N'-1,2-ethanediybisoctadecanamide	TOXICITY	IRRITATION

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Thermon EFS - 1

	Oral (mouse) LD50: >20000 mg/kg	[Hoechst Australia]
		Mucous memb. (rabbit) in PEG 400
		Non-irritant
		Skin (rabbit) patch in PEG400
		Slight irritant
	Not Available	Not Available
residual oils, petroleum, hydrotreated	TOXICITY	IRRITATION
	Not Available	Not Available
1,3-pentadiene/ 2-methyl-2-butene copolymer	TOXICITY	IRRITATION
	Not Available	Not Available
tris(3,5-di-tert-butyl-4-hydroxybenzyl) isocyanurate	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >10000 mg/kg *	Eye : Not irritating *
	Oral (rabbit) LD50: >6800 mg/kg *	Skin : Not irritating *
	Not Available	Not Available

* Value obtained from manufacturer's msds

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

Thermon EFS - 1	<p>No significant acute toxicological data identified in literature search.</p> <p>The chemicals in the Fatty Nitrogen Derived (FND) Amides are generally similar in terms of physical and chemical properties, environmental fate and toxicity. Its low acute oral toxicity is well established across all subcategories by the available data and show no apparent organ specific toxicity, mutation, reproductive or developmental defects.</p> <p>Laboratory testing shows that the fatty acid amide, cocoamide DEA, causes occupational allergic contact dermatitis, and that allergy to this substance is becoming more common.</p>
WOLLASTONITE	<p>No significant acute toxicological data identified in literature search.</p> <p>The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans.</p> <p>Evidence of carcinogenicity may be inadequate or limited in animal testing.</p>
RESIDUAL OILS, PETROLEUM, HYDROTREATED	<p>The materials included in the Lubricating Base Oils category are related from both process and physical-chemical perspectives;</p> <p>The potential toxicity of a specific distillate base oil is inversely related to the severity or extent of processing the oil has undergone, since:</p> <ul style="list-style-type: none"> ▶ 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 <i>residual base oils</i> 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. <p>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 carcinogenic and mutagenic activities. Highly and severely refined distillate base oils are produced from unrefined and mildly refined oils by removing or transforming undesirable components.</p>
TRIS(3,5-DI-TERT-BUTYL-4-HYDROXYBENZYL) ISOCYANURATE	<p>Ames (Test) negative: CHO Cells</p> <p>Data show that acute toxicity following oral and topical use of hindered phenols is low. They are not proven to cause mutations. However, long term use may affect the liver, thyroid, kidney and lymph nodes. Liver tumours have been reported.</p> <p>For tris(3,5-di-tert-butyl-4-hydroxybenzyl) isocyanurate Available mammalian acute toxicity data indicate very low toxicity by oral and dermal exposure. The LD50 values are >5000 mg/kg bw (oral) and >2000 mg/kg bw (dermal). The material does not show mutagenic or clastogenic properties. In sub-chronic toxicity studies in the rat and dog only minor effects have been observed. Skin Sensitization: (Guinea pig) Maximization test: Not a sensitizer.RIPT (Humans): Not a primary irritant, fatiguing agent, or sensitizer in any of 200 individuals when tested as a slurry (concentration not specified). Subchronic Toxicity: In a three month study, rats were administered dietary concentrations of 0, 150, 800, 3,000 and 15,000 ppm. There were no treatment-related changes in blood chemistry, organ weights or urinalysis. Macroscopic and microscopic examination did not reveal treatment-related effects. The females in the 3,000 and 15,000 dose groups were</p>

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	found to have a statistically significant, but slight, increase in mean circulating blood platelets. Genetic toxicity: Chromosomal Aberration Assay: Negative
GRAPHITE, N,N'-1,2-ETHANEDIYLBISOCTADECANAMIDE	Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS.
ETHYLENE/ VINYL ACETATE COPOLYMER, 1,3-PENTADIENE/ 2-METHYL-2-BUTENE COPOLYMER	No significant acute toxicological data identified in literature search.

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 required to make classification available
✘ – Data available but does not fill the criteria for classification
⊖ – Data Not Available to make classification

CMR STATUS

Not Applicable

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Harmful to aquatic organisms.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
N,N'-1,2-ethanediylobisocetadecanamide	LOW	LOW
tris(3,5-di-tert-butyl-4-hydroxybenzyl)isocyanurate	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
N,N'-1,2-ethanediylobisocetadecanamide	LOW (BCF = 6.2)
tris(3,5-di-tert-butyl-4-hydroxybenzyl)isocyanurate	LOW (BCF = 5.8)

Mobility in soil

Ingredient	Mobility
N,N'-1,2-ethanediylobisocetadecanamide	LOW (KOC = 5754000000)
tris(3,5-di-tert-butyl-4-hydroxybenzyl)isocyanurate	LOW (KOC = 10000000000)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	<ul style="list-style-type: none"> ▶ 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.
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SECTION 14 TRANSPORT INFORMATION**Labels Required**

Marine Pollutant	NO
HAZCHEM	Not Applicable

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

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

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

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

Source	Ingredient	Pollution Category
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	ethylene/ vinyl acetate copolymer	Y
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	N,N'-1,2-ethanediybisoctadecanamide	Y

SECTION 15 REGULATORY INFORMATION**Safety, health and environmental regulations / legislation specific for the substance or mixture**

graphite(7782-42-5) is found on the following regulatory lists	"Australia Exposure Standards", "Australia Inventory of Chemical Substances (AICS)", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "Australia Hazardous Substances Information System - Consolidated Lists"
ethylene/ vinyl acetate copolymer(24937-78-8) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)"
wollastonite(13983-17-0) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs"
N,N'-1,2-ethanediybisoctadecanamide(110-30-5) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)"
residual oils, petroleum, hydrotreated(64742-57-0) is found on the following regulatory lists	"Australia Exposure Standards", "Australia Inventory of Chemical Substances (AICS)", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "Australia Hazardous Substances Information System - Consolidated Lists"
1,3-pentadiene/ 2-methyl-2-butene copolymer(26813-14-9) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)"
tris(3,5-di-tert-butyl-4-hydroxybenzyl) isocyanurate(27676-62-6) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)"

SECTION 16 OTHER INFORMATION**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.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards

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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.

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