STONER A324

Barnes Products P/L

Chemwatch: 5247-11 Version No: 5.1

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

Chemwatch Hazard Alert Code: 4

Issue Date: **16/03/2023**Print Date: **29/03/2023**S.GHS.AUS.EN.E

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

Product Identifier

Product name	TONER A324	
Chemical Name	Not Applicable	
Synonyms	STONER A324 RAPID RELEASE,; A324	
Proper shipping name	AEROSOLS	
Chemical formula	Not Applicable	
Other means of identification	Not Available	

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

Relevant identified uses	Release agent

Details of the manufacturer or supplier of the safety data sheet

Registered company name	Barnes Products P/L	
Address	Address 5 Greenhills Avenue Moorebank NSW 2170 Australia	
Telephone	+61 2 9793 7555	
Fax	+61 2 9793 7091	
Website	Website http://www.barnes.com.au/	
Email sales@barnes.com.au		

Emergency telephone number

Association / Organisation	Barnes Products Pty Ltd	
Emergency telephone numbers	+61 2 9793 7555 Business Hours	
Other emergency telephone numbers	Poisons Information Centre 13 1126 after hours	

SECTION 2 Hazards identification

Classification of the substance or mixture

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

Chemwatch Hazard Ratings



Poisons Schedule	Not Applicable	
Classification [1]	Aerosols Category 1, Aspiration Hazard Category 1, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI	

Label elements

Hazard pictogram(s)







Signal word

Danger

Hazard statement(s)

AUH044	Risk of explosion if heated under confinement.	
H222+H229 Extremely flammable aerosol. Pressurized container: may burst if heated.		
H304	H304 May be fatal if swallowed and enters airways.	
H336	May cause drowsiness or dizziness.	

Precautionary statement(s) Prevention

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.	
P271	Use only outdoors or in a well-ventilated area.	
P261	Avoid breathing mist/vapours/spray.	

Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.	
P331	Do NOT induce vomiting.	
P312 Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.		
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	

Precautionary statement(s) Storage

P405	P405 Store locked up.	
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.		
P403+P233 Store in a well-ventilated place. Keep container tightly closed.		

Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
64741-66-8	<10	naphtha petroleum, light alkylate
8052-41-3.	<10	Stoddard Solvent
68476-85-7.	60-100	hydrocarbon propellant
Legend: 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L * EU IOELVs available		

SECTION 4 First aid measures

Description of first aid measures

Eye Contact	If 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.
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.
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.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

- ▶ Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

SECTION 5 Firefighting measures

Extinguishing media

SMALL FIRE:

▶ Water spray, dry chemical or CO2

LARGE FIRE:

Water spray or fog.

Do not use a water jet to fight fire.

Special hazards arising from the substrate or mixture

Fire	Incompatibility
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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. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot.
Fire/Explosion Hazard	 Liquid and vapour are highly flammable. Severe fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Severe explosion hazard, in the form of vapour, when exposed to flame or spark. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition with violent container rupture. Aerosol cans may explode on exposure to naked flames. Combustion products include: carbon dioxide (CO2) nitrogen oxides (NOx) other pyrolysis products typical of burning organic material. Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.
HAZCHEM	Not Applicable

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

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. Wipe up. If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so.

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

SECTION 7 Handling and storage

Precautions for safe handling

	<u> </u>
	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs.
	Use in a well-ventilated area.
Safe handling	Prevent concentration in hollows and sumps.
	▶ DO NOT enter confined spaces until atmosphere has been checked.
	Avoid smoking, naked lights or ignition sources.
	Avoid contact with incompatible materials.
	► Store below 38 deg. C.
	* 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.
Other information	▶ 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. Contents under pressure.
	Store away from incompatible materials.
	Store in a cool, dry, well ventilated area.

Conditions for safe storage, including any incompatibilities

Suitable container	 Aerosol dispenser. Check that containers are clearly labelled.
Storage incompatibility	► Avoid reaction with oxidising agents

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	Stoddard Solvent	White spirits	790 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	hydrocarbon propellant	LPG (liquified petroleum gas)	1000 ppm / 1800 mg/m3	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
Stoddard Solvent	300 mg/m3	1,800 mg/m3	29500** mg/m3
hydrocarbon propellant	65,000 ppm	2.30E+05 ppm	4.00E+05 ppm

Ingredient	Original IDLH	Revised IDLH
naphtha petroleum, light alkylate	Not Available	Not Available
Stoddard Solvent	20,000 mg/m3	Not Available
hydrocarbon propellant	2,000 ppm	Not Available

Occupational Exposure Banding

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

Exposure controls

Appropriate engineering controls

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. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.

Individual protection measures, such as personal protective equipment









Eye and face protection

No special equipment for minor exposure i.e. when handling small quantities.

OTHERWISE: For potentially moderate or heavy exposures:

- ► Safety glasses with side shields.
- ▶ NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them.

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.

Body protection

See Other protection below

No special equipment needed when handling small quantities. **OTHERWISE:**

- Overalls.
- Skin cleansing cream.
- ▶ Eyewash unit.

Other protection

- Do not spray on hot surfaces.
- 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.

Respiratory protection

Type AX 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	AX-AUS	-	AX-PAPR-AUS / Class 1
up to 50 x ES	-	AX-AUS / Class 1	-
up to 100 x ES	-	AX-2	AX-PAPR-2 ^

^ - 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)

Information on basic physical and chemical properties

Appearance	Cloudy white extremely flammable liquid (aerosol) with a petroleum odour; does not mix with water.		
Physical state	Liquid	Relative density (Water = 1)	0.53
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature (°C)	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
Evaporation rate	0.1-0.5 BuAC = 1	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	386 @ 21 C	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	2.01	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

information on toxicologi	CAI EFFECTS
Inhaled	The vapour is discomforting WARNING:Intentional misuse by concentrating/inhaling contents may be lethal. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure. Symptoms of asphyxia (suffocation) may include headache, dizziness, shortness of breath, muscular weakness, drowsiness and ringing in the ears. If the asphyxia is allowed to progress, there may be nausea and vomiting, further physical weakness and unconsciousness and, finally, convulsions, coma and death.
Ingestion	Overexposure is unlikely in this form. Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments Ingestion may result in nausea, abdominal irritation, pain and vomiting
Skin Contact	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. 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.

Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. Main route of exposure to the gas in the workplace is by inhalation. WARNING: Aerosol containers may present pressure related hazards.		
STONER A324	TOXICITY	IRRITATION	
	Not Available	Not Available	
	TOXICITY	IRRITATION	
naphtha petroleum, light	Dermal (rabbit) LD50: >1900 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]	
alkylate	Inhalation(Rat) LC50: >4.42 mg/L4h ^[1]	Skin: adverse effect observed (irritating) ^[1]	
	Oral (Rat) LD50: >4500 mg/kg ^[1]		
	TOXICITY	IRRITATION	
	Dermal (rabbit) LD50: >3000 mg/kg ^[1]	Eye (hmn) 470 ppm/15m irrit.	
0, 11, 10, 1	Inhalation(Rat) LC50: >5.5 mg/l4h ^[1]	Eye (rabbit) 500 mg/24h moderate	
Stoddard Solvent	Oral (Rat) LD50: >5000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]	
		Skin: adverse effect observed (irritating) ^[1]	
		Skin: no adverse effect observed (not irritating) ^[1]	
	TOXICITY	IRRITATION	
hydrocarbon propellant	Inhalation(Rat) LC50: 658 mg/l4h ^[2]	Not Available	
Legend:	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		

The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to

For Low Boiling Point Naphthas (LBPNs):

irritants may produce conjunctivitis.

Acute toxicity:

LBPNs generally have low acute toxicity by the oral (median lethal dose [LD50] in rats > 2000 mg/kg-bw), inhalation (LD50 in rats > 5000 mg/m3) and dermal (LD50 in rabbits > 2000 mg/kg-bw) routes of exposure

Most LBPNs are mild to moderate eye and skin irritants in rabbits, with the exception of heavy catalytic cracked and heavy catalytic reformed naphthas, which have higher primary skin irritation indices.

Sensitisation:

LBPNs do not appear to be skin sensitizers, but a poor response in the positive control was also noted in these studies **Repeat dose toxicity:**

The lowest-observed-adverse-effect concentration (LOAEC) and lowest-observed-adverse-effect level (LOAEL) values identified following short-term (2-89 days) and subchronic (greater than 90 days) exposure to the LBPN substances. These values were determined for a variety of endpoints after considering the toxicity data for all LBPNs in the group. Most of the studies were carried out by the inhalation route of exposure. Renal effects, including increased kidney weight, renal lesions (renal tubule dilation, necrosis) and hyaline droplet formation, observed in male rats exposed orally or by inhalation to most LBPNs, were considered species- and sex-specific These effects were determined to be due to a mechanism of action not relevant to humans -specifically, the interaction between hydrocarbon metabolites and alpha-2-microglobulin, an enzyme not produced in substantial amounts in female rats, mice and other species, including humans. The resulting nephrotoxicity and subsequent carcinogenesis in male rats were therefore not considered in deriving LOAEC/LOAEL values.

Only a limited number of studies of short-term and subchronic duration were identified for site-restricted LBPNs. The lowest LOAEC identified in these studies, via the inhalation route, is 5475 mg/m3, based on a concentration-related increase in liver weight in both male and female rats following a 13-week exposure to light catalytic cracked naphtha. Shorter exposures of rats to this test substance resulted in nasal irritation at 9041 mg/m3

No systemic toxicity was reported following dermal exposure to light catalytic cracked naphtha, but skin irritation and accompanying histopathological changes were increased, in a dose-dependent manner, at doses as low as 30 mg/kg-bw per day when applied 5 days per week for 90 days in rats

No non-cancer chronic toxicity studies (= 1 year) were identified for site-restricted LBPNs and very few non-cancer chronic toxicity studies were identified for other LBPNs.

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 cycloparaffins.

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. Some hydrocarbons may appear unchanged as in the lipoprotein particles in the gut lymph, but most hydrocarbons partly separate from fats and undergo metabolism in the gut cell. The gut cell may play a major role in determining the proportion of hydrocarbon that becomes available to be deposited unchanged in peripheral tissues such as in the body fat stores or the liver.

The skin irritation potential of the test substance was determined according to OECD 404 . The test substance was applied to the intact skin of rabbits for 4 hours under semiocclusive conditions. After removal of the test substance, no edema, but well-defined to moderate erythema were noted in all three animals. Irritating effects were reversible within 9 days. Under the test conditions, the test substance was irritating to the skin. The eye irritation potential of the hydrocarbons, C7-C9, isoalkanes was determined by instillation of 0.1 mL of the test material into the conjunctival sac of 3 rabbits . Ocular reactions were examined and scored 1, 24, 48, 72 hours after application. At the 1 hour evaluation, conjunctival redness (grade 2) was observed in all animals.

NAPHTHA PETROLEUM, LIGHT ALKYLATE

Conjunctival redness (grade 0-1) was also noted in all animals at the 72 hour evaluation. All redness was reversible within 7 days. No corneal opacity, iritis or conjunctival chemosis was noted in any of the 3 rabbits. Two further studies, performed according to OECD 404) showed that no ocular irritation in any animal at any time point could be observed for the compounds Isopar E and Isopar C. In another study conducted similar to OECD 405, at 1 hour after administration, 4 of 6 animals showed slight erythema which completely subsided by the 4 hour observation. Based on read-across from a structurally related substance within a category approach, hydrocarbons, C7-C9, isoalkanes are not considered to be a skin sensitiser. Based on read-across from a structurally related substance (light alkylate naphtha distillate), no inhalation repeated dose toxicity is expected from the exposure to hydrocarbons, C7-C9, iso-alkanes. No need for classification according to the DSD and CLP criteria for classification and labelling. Systemic toxicity of hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats . In this study, repeated exposure to 400 or 1200 ppm of the test substance for 6 hours/day, 5 days/week, for 12 weeks resulted in male rat kidney effects consistent with the alpha-2µ-globulin-induced nephropathy in male rats. There was no treatment-related mortality and clinical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rat nephropathy) was determined to be >1200ppm. The fact, that alpha-2u-globulin-induced nephropathy was strictly limited to male rats and that the test substance belongs to a category of substances which are known for their ability to induce nephropathy in male rats due to their exclusive expression of alpha-2µ -globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to OECD 478) showed no evidence of genotoxicity in the germ cells of treated male rats exposed to 400 or 1200 ppm by inhalation. The in vivo genotoxicity of further category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7 -C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not genotoxic. In vitro: Negative Ames test with S. typhimurium TA 1535, TA 1537, TA 1538, TA 98 and TA 100, and E. coli WP2 and WP2 uvr A, with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. In vivo: Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons category. However, with regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction: therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier

NAPHTHA PETROLEUM, LIGHT ALKYLATE & HYDROCARBON PROPELLANT

No significant acute toxicological data identified in literature search. inhalation of the gas

NAPHTHA PETROLEUM, LIGHT ALKYLATE & STODDARD SOLVENT

For petroleum: This product contains benzene, which can cause acute myeloid leukaemia, and n-hexane, which can be metabolized to compounds which are toxic to the nervous system. This product contains toluene, and animal studies suggest high concentrations of toluene lead to hearing loss. This product contains ethyl benzene and naphthalene, from which animal testing shows evidence of tumour formation.

Cancer-causing potential: Animal testing shows inhaling petroleum causes tumours of the liver and kidney; these are however not considered to be relevant in humans.

Mutation-causing potential: Most studies involving gasoline have returned negative results regarding the potential to cause mutations, including all recent studies in living human subjects (such as in petrol service station attendants).

Reproductive toxicity: Animal studies show that high concentrations of toluene (>0.1%) can cause developmental effects such as lower birth weight and developmental toxicity to the nervous system of the foetus. Other studies show no adverse effects on the

Human effects: Prolonged or repeated contact may cause defatting of the skin which can lead to skin inflammation and may make the skin more susceptible to irritation and penetration by other materials.

Animal testing shows that exposure to gasoline over a lifetime can cause kidney cancer, but the relevance in humans is questionable.

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

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

✓ – Data available to make classification

SECTION 12 Ecological information

	Endpoint	Test Duration (hr)	Species	Value	Source
STONER A324	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	72h	Algae or other aquatic plants	0.1mg/l	1
naphtha petroleum, light	EC50	72h	Algae or other aquatic plants	13mg/l	1
alkylate	LC50	96h	Fish	0.11mg/l	2
	EC50	96h	Algae or other aquatic plants	64mg/l	2
	EC50	48h	Crustacea	0.4mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	3072h	Fish	1mg/l	1
	LC50	96h	Fish	2.2mg/l	4
Stoddard Solvent	NOEC(ECx)	720h	Fish	0.02mg/l	2
	EC50	96h	Algae or other aquatic plants	0.277mg/l	2
	LC50	96h	Fish	0.14mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50(ECx)	96h	Algae or other aquatic plants	7.71mg/l	2
hydrocarbon propellant	LC50	96h	Fish	24.11mg/l	2
	EC50	96h	Algae or other aquatic plants	7.71mg/l	2
Legend:	4. US EPA, Ec	·	e ECHA Registered Substances - Ecotoxicologic lata 5. ECETOC Aquatic Hazard Assessment Da centration Data 8. Vendor Data	•	atic Toxicit

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential

Ingredient	Bioaccumulation
Stoddard Solvent	LOW (BCF = 159)

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging

disposal

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

SECTION 14 Transport information

Labels Required



Land transport (ADG)

UN number or ID number	1950		
UN proper shipping name	AEROSOLS		
Transport hazard class(es)			
Packing group	Not Applicable		
Environmental hazard	Not Applicable	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; Aerosols, flammable (engine starting fluid)			
Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subrisk ERG Code	2.1 Not Applicable 10L		
Packing group	Not Applicable			
Environmental hazard	Not Applicable			
	Special provisions		A145 A167 A802; A1 A145 A167 A802	
	Cargo Only Packing Instructions		203	
	Cargo Only Maximum Qty / Pack		150 kg	
Special precautions for user	Passenger and Cargo Packing Instructions		203; Forbidden	
4501	Passenger and Cargo Maximum Qty / Pack		75 kg; Forbidden	
	Passenger and Cargo Limited Quantity Packing Instructions		Y203; Forbidden	
	Passenger and Cargo Limited Maximum Qty / Pack		30 kg G; Forbidden	

Sea transport (IMDG-Code / GGVSee)

UN number	1950		
UN proper shipping name	AEROSOLS		
Transport hazard class(es)		2.1 Not Applicable	
Packing group	Not Applicable		
Environmental hazard	Not Applicable	Not Applicable	
Special precautions for user	EMS Number Special provisions Limited Quantities		

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

Not Applicable

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

Product name	Group
naphtha petroleum, light alkylate	Not Available
Stoddard Solvent	Not Available

Product name	Group
hydrocarbon propellant	Not Available

Transport in bulk in accordance with the IGC Code

Product name	Ship Type
naphtha petroleum, light alkylate	Not Available
Stoddard Solvent	Not Available
hydrocarbon propellant	Not Available

SECTION 15 Regulatory information

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

naphtha petroleum, light alkylate is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australian Inventory of Industrial Chemicals (AIIC)

Stoddard Solvent is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

hydrocarbon propellant is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

National Inventory Status

National Inventory	Status		
Australia - AIIC / Australia Non-Industrial Use	Yes		
Canada - DSL	Yes		
Canada - NDSL	No (naphtha petroleum, light alkylate; Stoddard Solvent; hydrocarbon propellant)		
China - IECSC	Yes		
Europe - EINEC / ELINCS / NLP	Yes		
Japan - ENCS	No (naphtha petroleum, light alkylate)		
Korea - KECI	Yes		
New Zealand - NZIoC	Yes		
Philippines - PICCS	Yes		
USA - TSCA	Yes		
Taiwan - TCSI	Yes		
Mexico - INSQ	No (naphtha petroleum, light alkylate)		
Vietnam - NCI	Yes		
Russia - FBEPH	No (naphtha petroleum, light alkylate)		
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.		

SECTION 16 Other information

Revision Date	16/03/2023
Initial Date	10/03/2017

SDS Version Summary

Version

Version	Date of Update	Sections Updated
4.1	23/12/2022	Classification review due to GHS Revision change.
5.1	16/03/2023	Hazards identification - Classification, Identification of the substance / mixture and of the company / undertaking - Supplier Information, Identification of the substance / mixture and of the company / undertaking - Synonyms, Name

Other information

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

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

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC—STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

ES: Exposure Standard OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

AIIC: Australian Inventory of Industrial Chemicals

DSL: Domestic Substances List NDSL: Non-Domestic Substances List

IECSC: Inventory of Existing Chemical Substance in China

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

NLP: No-Longer Polymers

ENCS: Existing and New Chemical Substances Inventory

KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals

PICCS: Philippine Inventory of Chemicals and Chemical Substances

TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas

NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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