

Mopar(FCA US LLC Service & Customer Care Division)

Version No: 6.9

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Chemwatch Hazard Alert Code: 3

Issue Date: 04/23/2021 Print Date: 12/31/2024 S.GHS.USA.EN

SECTION 1 Identification

Product Identifier

Product name	Water (Mopar Total Clean Trigger Spray)
Chemical Name	Not Applicable
Synonyms	04318020AE, 04318020AD, 04897840AC, 04897840AD, 68319190AA, 68319190AB, 68341322AA, 68354812AA, 68319193AB
Chemical formula	Not Applicable
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses Cleaning Solution

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	Mopar(FCA US LLC Service & Customer Care Division)	Mopar (FCA US LLC Service & Customer Care Division)
Address	26311 Lawrence Avenue, Center Line Michigan 48015 United States	26311 Lawerence Avenue, Center Line Michigan 48015 United States
Telephone	1-800-846-6727	1-800-846-6727
Fax		
Website	Not Available	Not Available
Email	moparsds@fcagroup.com	moparsds@fcagroup.com

Emergency phone number

Association / Organisation	CHEMTREC	CHEMTREC
Emergency telephone number(s)	+1 703-741-5970	+1 703-741-5970
Other emergency telephone number(s)	248-512-8002	248-512-8002

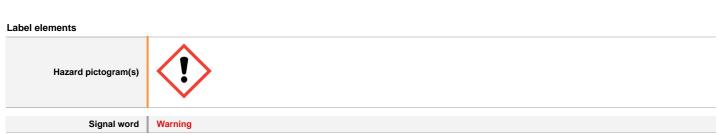
SECTION 2 Hazard(s) identification

Classification of the substance or mixture



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification	Serious Eye Damage/Eye Irritation Category 2A



Hazard statement(s)	
H319	Causes serious eye irritation.
Hazard(s) not otherwise classi	fied
Not Applicable	
Precautionary statement(s) Pr	evention
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement(s) Re P305+P351+P338	sponse IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P337+P313 Precautionary statement(s) Sto Not Applicable	
Precautionary statement(s) St	orage

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
111-76-2	1	ethylene glycol monobutyl ether
7732-18-5	96.65-97.15	water
6440-58-0	0.07-0.09	DMDM-hydantoin
55406-53-6	<0.01	3-iodo-2-propynyl butyl carbamate
100-42-5	<0.01	styrene
Not Available	1-1.5	Anionic Polymers
Not Available	0.05-0.5	Anionic Surfactants

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 First-aid measures

Description of first aid measures		
Eye Contact	 Generally not applicable. 	
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. Generally not applicable. 	
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. 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. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor. Generally not applicable. 	
Ingestion	 Generally not applicable. 	

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

- For acute or short term repeated exposures to ethylene glycol:
- Early treatment of ingestion is important. Ensure emesis is satisfactory.
- Test and correct for metabolic acidosis and hypocalcaemia.
- Apply sustained diuresis when possible with hypertonic mannitol.
- Evaluate renal status and begin haemodialysis if indicated. [I.L.O]
 Banid absorption is an indication that emosily or laware is offective as he in the first family have. On the first family have a status of the first f
- Rapid absorption is an indication that emesis or lavage is effective only in the first few hours. Cathartics and charcoal are generally not effective.
- Correct acidosis, fluid/electrolyte balance and respiratory depression in the usual manner. Systemic acidosis (below 7.2) can be treated with intravenous sodium bicarbonate solution.
- Ethanol therapy prolongs the half-life of ethylene glycol and reduces the formation of toxic metabolites.
- Pyridoxine and thiamine are cofactors for ethylene glycol metabolism and should be given (50 to 100 mg respectively) intramuscularly, four times per day for 2 days.
 Magnesium is also a cofactor and should be replenished. The status of 4-methylpyrazole, in the treatment regime, is still uncertain. For clearance of the material and its metabolites, haemodialysis is much superior to peritoneal dialysis.

[Ellenhorn and Barceloux: Medical Toxicology]

It has been suggested that there is a need for establishing a new biological exposure limit before a workshift that is clearly below 100 mmol ethoxy-acetic acids per mole creatinine in morning urine of people occupationally exposed to ethylene glycol ethers. This arises from the finding that an increase in urinary stones may be associated with such exposures.

Laitinen J., et al: Occupational & Environmental Medicine 1996; 53, 595-600

SECTION 5 Fire-fighting measures

Extinguishing media

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas. Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances.

In such an event consider:

foam.

dry chemical powder.

carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility None known.

Special protective equipment and precautions for fire-fighters

Fire Fighting	 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. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. Slight hazard when exposed to heat, flame and oxidisers.
	 Non combustible. Not considered to be a significant fire risk. Expansion or decomposition on heating may lead to violent rupture of containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO). May emit acrid smoke.
Fire/Explosion Hazard	hydrogen iodide , other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes. Articles and manufactured articles may constitute a fire hazard where polymers form their outer layers or where combustible packaging remains in place. Certain substances, found throughout their construction, may degrade or become volatile when heated to high temperatures. This may create a secondary hazard.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Methods and material for conta	anment and cleaning up
Minor Spills	 Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal. Clean up all spills immediately. Secure load if safe to do so. Bundle/collect recoverable product. Collect remaining material in containers with covers for disposal.
Major Spills	 Clear area of personnel and move upwind. 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 course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralise/decontaminate residue (see Section 13 for specific agent). Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services. Minor hazard. 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. Prevent spillage from entering drains or water ways. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Absorb premaining product with sand, earth or vermiculite and place in appropriate containers for disposal. Wash area and prevent runoff into drains or waterways. If contamination of drains or waterways occurs, advise emergency services. Wash area and prevent runoff finto drains or water ways. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal. Wash area and prevent runoff into drains or waterways. If contamination of drains or waterways occurs, advise emergency services. Clean up all spills immediately.

	 Wear protective clothing, safety glasses, dust mask, gloves. Secure load if safe to do so. Bundle/collect recoverable product. Use dry clean up procedures and avoid generating dust. Vacuum up (consider explosion-proof machines designed to be grounded during storage and use). Water may be used to prevent dusting. Collect remaining material in containers with covers for disposal. Flush spill area with water.
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Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling	
Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
Other information	Store in the dark. Store away from incompatible materials.

Conditions for safe storage, including any incompatibilities

Suitable container	Generally packaging as originally supplied with the article or manufactured item is sufficient to protect against physical hazards. If repackaging is required ensure the article is intact and does not show signs of wear. As far as is practicably possible, reuse the original packaging or something providing a similar level of protection to both the article and the handler.
Storage incompatibility	 Formaldehyde: is a strong reducing agent may polymerize in air unless properly inhibited (usually with methanol up to 15%) and stored at controlled temperatures will polymerize with active organic material such as phenol reacts violently with strong oxidisers, hydrogen peroxide, potassium permanganate, acrylonitrile, caustics (sodium hydroxide, yielding formic acid and flammable hydrogen), magnesium carbonate, nitromethane, nitrogen oxides (especially a elevated temperatures), peroxyformic acid is incompatible with strong acids (hydrochloric acid forms carcinogenic bis(chloromethyl)ether*), amines, ammonia, aniline, bisulfides, gelatin, iodine, magnesite, phenol, some monomers, tannins, salts of copper, iron, silver. acid catalysis can produce impurities: methylal, methyl formate Aqueous solutions of formaldehyde: slowly oxidise in air to produce formic acid attack carbon steel Concentrated solutions containing formaldehyde are: unstable, both oxidising slowly to form formic acid and polymerising; in dilute aqueous solutions formaldehyde appears as monomeric hydrate (methylene glycol) - the more concentrated the solution the more polyoxymethylene glycol occurs as oligomers and polymers (methanol and amine-containing compounds inhibit polymer formation) readity subject to polymerisation, at room temperature, in the presence of air and moisture, to form paraformaldehyde (8-100 units of formaldehyde), a solid mixture of linear polyoxymethylene glycols containing 90-99% formaldehyde; a cyclic trimer, trioxane (CH2O3), may also form Flammable and/or toxic gases are generated by the combination of aldehydes with azo, diazo compounds, dithiocarbamates, nitrides, and strong reducing agents *The empirical equation may be used to determine the concentration of bis(chloromethyl)ether (BCME) formed by reaction with HCI: log(BCME)ppb = -2.25 + 0.67 · log(HCHO) ppm + 0.77 · log(HC

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

	(022)					
INGREDIENT DATA						
Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Limits (PELs) Table Z-1	ethylene glycol monobutyl ether	2-Butoxyethanol	50 ppm / 240 mg/m3	Not Available	Not Available	Skin designation
US NIOSH Recommended Exposure Limits (RELs)	ethylene glycol monobutyl ether	2-Butoxyethanol	5 ppm / 24 mg/m3	Not Available	Not Available	[skin]
US OSHA Permissible Exposure Limits (PELs) Table Z-1	3-iodo-2-propynyl butyl carbamate	Particulates Not Otherwise Regulated (PNOR)- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	3-iodo-2-propynyl butyl carbamate	Particulates Not Otherwise Regulated (PNOR)- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	3-iodo-2-propynyl butyl carbamate	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available

Source	Ingredient	Material name		TWA	STEL		Peak	Notes
US OSHA Permissible Exposure Limits (PELs) Table Z-3	3-iodo-2-propynyl butyl carbamate	Inert or Nuisance Du fraction	st: Respirable	5 mg/m3 / 15 mppcf	Not Ava	ilable	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	3-iodo-2-propynyl butyl carbamate	Particulates not othe	Particulates not otherwise regulated		Not Ava	ilable	Not Available	See Appendix D
US OSHA Permissible Exposure Limits (PELs) Table Z-2	styrene	Styrene		100 ppm	200 ppr	n	600 (5 min in any 3 hr) ppm	(Z37.15- 1969)
US NIOSH Recommended Exposure Limits (RELs)	styrene			50 ppm / 215 mg/m3	425 mg 100 ppr		Not Available	Not Available
Emergency Limits								
Ingredient	TEEL-1		TEEL-2			TEEL	-3	
ethylene glycol monobutyl ether	60 ppm 120		120 ppm		700 ppm		pm	
3-iodo-2-propynyl butyl carbamate	3.3 mg/m3		36 mg/m3		220 mg/m3			
styrene	Not Available Not Available		Not Available		Not Available			
Ingredient	Original IDLH			Revised II	DLH			
ethylene glycol monobutyl ether	700 ppm		Not Availa	Not Available				
water	Not Available		Not Availa	Not Available				
DMDM-hydantoin	Not Available		Not Availa	Not Available				
3-iodo-2-propynyl butyl carbamate	Not Available		Not Availa	Not Available				
styrene	700 ppm			Not Availa	Not Available			
Occupational Exposure Banding	g							
Ingredient	Occupational Expos	ure Band Rating		Occupat	ional Expo	sure Ba	nd Limit	
DMDM-hydantoin	E			≤ 0.01 m	≤ 0.01 mg/m ³			
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency an adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which correspondence to a range of exposure concentrations that are expected to protect worker health.							

Exposure controls

	Articles or manufactured items, in their original condition, get					
	Exceptions may arise following extensive use and subsequent wear, during recycling or disposal operations where substances, found in the article, may be released to the environment.					
	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls					
	can be highly effective in protecting workers and will typically The basic types of engineering controls are:	/ be independent of worker interactions to provide this hig	h level of protection.			
	Process controls which involve changing the way a job activi Enclosure and/or isolation of emission source which keeps a		contilation that			
	strategically "adds" and "removes" air in the work environme					
	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.					
	Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection. An approved self contained breathing apparatus (SCBA) may be required in some situations. Provide adequate ventilation in warehouse or closed storage area. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.					
	Type of Contaminant:		Air Speed:			
	solvent, vapours, degreasing etc., evaporating from tank (i	0.25-0.5 m/s (50- 100 f/min.)				
Appropriate engineering controls	aerosols, fumes from pouring operations, intermittent conta spray drift, plating acid fumes, pickling (released at low vel	0.5-1 m/s (100- 200 f/min.)				
	direct spray, spray painting in shallow booths, drum filling, generation into zone of rapid air motion)	1-2.5 m/s (200- 500 f/min.)				
	grinding, abrasive blasting, tumbling, high speed wheel ge of very high rapid air motion).	2.5-10 m/s (500- 2000 f/min.)				
	Within each range the appropriate value depends on:					
	Lower end of the range	Upper end of the range				
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents				
	2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity				
	3: Intermittent, low production.	3: High production, heavy use				
	4: Large hood or large air mass in motion	4: Small hood-local control only				
	Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity gen decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for exam a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. (In multiplied by factors of 10 or more when extraction systems are installed or used.					

Individual protection measures, such as personal protective equipment	
Eye and face protection	 No special equipment required due to the physical form of the product. Safety glasses with side shields. Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber No special equipment required due to the physical form of the product.
Body protection	See Other protection below
Other protection	 Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit.

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index". The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection: Water (Mopar Total Clean Trigger Spray)

Material	CPI
BUTYL	С
NAT+NEOPR+NITRILE	С
NATURAL RUBBER	С
NEOPRENE	С
NITRILE	С
NITRILE+PVC	С
PE/EVAL/PE	С
PVA	С
PVC	С
SARANEX-23	С
TEFLON	С
VITON	С

* 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

 $\ensuremath{\text{NOTE}}$: 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.

Ansell Glove Selection

Glove — In order of recommendation
AlphaTec® 38-612
AlphaTec® 53-001
AlphaTec® 58-005
MICROFLEX® SafeGrip [™] SG-375
AlphaTec® Solvex® 37-175
BioClean™ Emerald BENS
BioClean™ Extra BLAS
BioClean™ Fusion (Sterile) S-BFAP
BioClean™ N-Plus BNPS
BioClean™ Ultimate BUPS

The suggested gloves for use should be confirmed with the glove supplier.

Respiratory protection

Respiratory protection not normally required due to the physical form of the product.

Information on basic physical and chemical properties

Appearance	Light sensitive. Clear Amber Liquid		
Physical state	Article	Relative density (Water = 1)	1.13
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	8	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 Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available
Heat of Combustion (kJ/g)	Not Available	Ignition Distance (cm)	Not Available
Flame Height (cm)	Not Available	Flame Duration (s)	Not Available
Enclosed Space Ignition Time Equivalent (s/m3)	Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available
Nanoform Solubility	Not Available	Nanoform Particle Characteristics	Not Available
Particle Size	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

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Inhaled	The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of the material, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.			
Ingestion	The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum.			
Skin Contact	Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. 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	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).			
Chronic	Long-term exposure to the product is not thought to produ animal models); nevertheless exposure by all routes shou	uce chronic effects adverse to the health (as classified by EC Directives using Ild be minimised as a matter of course.		
Water (Mopar Total Clean	ΤΟΧΙΟΙΤΥ	IRRITATION		
Trigger Spray)	Not Available	Not Available		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
	Dermal (Guinea Pig) LD50: 210 mg/kg ^[2]	Eye (Rodent - rabbit): 100mg/24H - Moderate		
ethylene glycol monobutyl	Inhalation (Rat) LC50: 450 ppm4h ^[2]	Eye: adverse effect observed (irritating) ^[1]		
ether	Oral (Rat) LD50: 250 mg/kg ^[2]	Skin (Rodent - rabbit): 500mg - Mild		
		Skin: adverse effect observed (irritating) ^[1]		
		Skin: no adverse effect observed (not irritating) ^[1]		

	ΤΟΧΙΟΙΤΥ	IRRITATION		
water	Oral (Rat) LD50: >90000 mg/kg ^[2]	Not Available		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]		
DMDM-hydantoin	Oral (Rat) LD50: 2000 mg/kg ^[2]	Skin (Rodent - rabbit): 2mg/24H - Moderate		
		Skin: no adverse effect observed (not irritating) $^{\left[1 \right]}$		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
3-iodo-2-propynyl butyl	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Eye: adverse effect observed (irreversible damage		
carbamate	Inhalation (Rat) LC50: 0.63 mg/l4h ^[1]	Skin (Human): 0.3%/48H		
	Oral (Rat) LD50: 1056 mg/kg ^[1]	Skin: no adverse effect observed (not irritating) ^[1]		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye (Human): 50ppm - Mild		
	Inhalation (Mouse) LC50: 9.5 mg/L4h ^[2]	Eye (Rodent - rabbit): 100mg - Severe		
styrene	Oral (Mouse) LD50; 316 mg/kg ^[2]	Eye (Rodent - rabbit): 100mg/24H - Moderate		
		Skin (Human): 500mg		
		Skin (Rodent - rabbit): 100% - Moderate		
		Skin (Rodent - rabbit): 500mg - Mild		

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Legend:
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1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

	NOTE: Changes in kidney, liver, spleen and lungs are observed in animals exposed to high concentrations of this substance by all routes. ** ASCC (NZ) SDS The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. For ethylene glycol monoalkyl ethers and their acetates (EGMAEs): Typical members of this category are ethylene glycol propylene ether (EGPE), ethylene glycol butyl ether (EGBE) and ethylene glycol hexyl ether (EGHE) and their acetates. EGMAEs are substrates for alcohol dehydrogenase isozyme ADH-3, which catalyzes the conversion of their terminal alcohols to aldehydes (which are transient metabolites). Further, rapid conversion of the aldehydes by aldehyde dehydrogenase produces alkoxyacetic acids, which are the predominant urinary metabolites of mono substituted glycol ethers. Acute Toxicity : Oral LD50 values in rats for all category members range from T39 (EGHE) to 3089 mg/kg bw (EGPE), with values increasing with decreasing molecular weight. Four to six hour acute inhalation toxicity studies were conducted for these chemicals in rats at the highest vapour concentrations practically achievable. Values range from LCO > 85 ppm (508 mg/m3) for EGHE, LC50 > 400ppm (2620 mg/m3) for EGBEA to LC50 > 2132 ppm (9061 mg/m3) for EGPE. No lethality was observed for any of these materials under these conditions. Dermal LD50 values in rabbits range from 435 mg/kg bw (EGBE) to 1500 mg/kg bw (EGBEA). Overall these category members can be considered to be of low to moderate acute toxicity. All category members. EGPE and EGBE are not sensitisers in experimental animals or humans. Signs of acute toxicity in rats, mice and rabbits are consistent with haemolysis (with the exception of EGHE) and non-specific CNS depression typical of organic solvents in general. Alkoxyacetic acid metabolites, propoxyacetic acid (PAA) and butoxyacetic acid (BAA), are responsible for the red blood cell hemolysis. Signs of toxicity in humans
ETHYLENE GLYCOL MONOBUTYL ETHER	Red blood cells of humans are many-fold more resistant to toxicity from EGPE and EGBE <i>in vitro</i> than those of rats. Repeat dose toxicity: The fact that the NOAEL for repeated dose toxicity of EGBE is less than that of EGPE is consistent with red blood cells being more sensitive to EGBE than EGPE. Blood from mice, rats, hamsters, rabbits and baboons were sensitive to the effects of BAA <i>in</i> <i>vitro</i> and displayed similar responses, which included erythrocyte swelling (increased haematocrit and mean corpuscular hemoglobin), followed by hemolysis. Blood from humans, pigs, dogs, cats, and guinea pigs was less sensitive to haemolysis by BAA <i>in vitro</i> . Mutagenicity: In the absence and presence of metabolic activation, EGBE tested negative for mutagenicity in Ames tests conducted in S. <i>typhimurium</i> strains TA97, TA98, TA100, TA1535 and TA1537 and EGHE tested negative in strains TA98, TA100, TA1535, TA1537 and
	TA1538. In vitro cytogenicity and sister chromatid exchange assays with EGBE and EGHE in Chinese Hamster Ovary Cells with and without metabolic activation and in vivo micronucleus tests with EGBE in rats and mice were negative, indicating that these glycol ethers are not genotoxic. Carcinogenicity: In a 2-year inhalation chronic toxicity and carcinogenicity study with EGBE in rats and mice a significant increase in the incidence of liver haemangiosarcomas was seen in male mice and forestomach tumours in female mice. It was decided that based on the
	mode of action data available, there was no significant hazard for human carcinogenicity Reproductive and developmental toxicity . The results of reproductive and developmental toxicity studies indicate that the glycol ethers in this category are not selectively toxic to the reproductive system or developing fetus, developmental toxicity is secondary to maternal toxicity. The repeated dose toxicity studies in which reproductive organs were examined indicate that the members of this category are not associated with toxicity to reproductive organs (including the testes). Results of the developmental toxicity studies conducted via inhalation exposures during gestation periods on EGPE (rabbits -125, 250, 500
	ppm or 531, 1062, or 2125 mg/m3 and rats - 100, 200, 300, 400 ppm or 425, 850, 1275, or 1700 mg/m3), EGBE (rat and rabbit - 25, 50, 100, 200 ppm or 121, 241, 483, or 966 mg/m3), and EGHE (rat and rabbit - 20.8, 41.4, 79.2 ppm or 124, 248, or 474 mg/m3) indicate that the members of the category are not teratogenic. The NOAELs for developmental toxicity are greater than 500 ppm or 2125 mg/m3 (rabbit-EGPE), 100 ppm or 425 mg/m3 (rat-EGPE), 50 ppm or 241 mg/m3 (rat EGBE) and 100 ppm or 483 mg/m3 (rabbit EGBE) and greater than 79.2 ppm or 474 mg/m3 (rat and rabbit-EGHE). Animal testing showed that exposure to ethylene glycol monobutyl ether resulted in toxicity to both the mother and the embryo. Reproductive effects were thought to be less than that of other monoalkyl ethers of ethylene glycol.
	Chronic exposure may cause anaemia, with enlargement and fragility of red blood cells. It is thought that in animals butoxyethanol may cause generalized clotting and bone infarction. In animals, 2-butoxyethanol also increased the rate of some cancers, including liver cancer.
DMDM-HYDANTOIN	DMDMH is of low to moderate acute toxicity in mammals. The acute oral LD50 is reported in two different studies as 1572 and 2046 mg/kg respectively while the dermal LD50 is above 1052 mg/kg. Testing by the inhalation route is not scientifically justified. The hydrolysis product DMH is of low acute toxicity in mammals. The acute oral LD50 is 10000 - 20000 mg/kg and the dermal LD50 is above 20000 mg/kg. Both DMDMH and DMH are not skin sensitisers. In the case of long term testing, the data on DMH is considered more relevant. In a 90 day study with DMH the NOAEL was 1000 mg/kg and in 90 day dermal study the NOEL was 390 mg/kg (limited by solubility). The results from the various repeat dose studies on both DMDMH and DMH do not meet the criteria for classification. DMDMH gave mainly negative results with in vitro bacterial mutation assays though one of the four available assays was positive. It gave positive results with in vitro cytogenetics, in

	vitro mammalian gene mutation and in vitro UDS assays. However it gave negative results with an in vivo micronucleus assay and ar alkaline elution assay. DMH gave negative results in all the in vitro studies performed (bacterial mutation, cytogenetics, mammalian g mutation and UDS). DMH did not demonstrate a carcinogenic response in either the rat or the mouse. DMH was tested in three developmental toxicity studies and did not demonstrate developmental toxicity. The structurally related substance EMH was also test three developmental toxicity studies and also did not demonstrate developmental toxicity. 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 iritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudde of persistent asthma-like symptoms within minutes to hours of a documented exposure to the initant. Other criteria for diagnosis of R include a reversible airflow pattern on lung function tests, moderate to severe bronchial hypereactivity on methacholine challenge test and the lack of minimal lymphocytic inflammation, without exoinophila. RADS (or asthma) following an initiating inhalation is an infre- disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial b is a disorder that occurs as a result of exposure of the determine the severity of symptoms. Some people may be genecically r prone than others, and exposure to dexposure of the determine the severity of symptoms. Some people may be genecically r prone than others, and exposure to other irritants may aggravate symptoms. Allergy causing activity is due to interactions with proteir Attention should be paid to atopic diathesis, characterised by increased susceptibility to nasal inflammation, asthma		terial mutation, cytogenetics, mammalian gene the mouse. DMH was tested in three irally related substance EMH was also tested in ial ends. This may be due to a non-allergic exposure to high levels of highly irritating ease in a non-atopic individual, with sudden onset the irritant. Other criteria for diagnosis of RADS perreactivity on methacholine challenge testing, following an irritating inhalation is an infrequent substance. On the other hand, industrial bronchitis stance (often particles) and is completely gh and mucus production. antibodies and allergens and occur rapidly. nptoms. Some people may be genetically more ng activity is due to interactions with proteins. Isal inflammation, asthma and eczema. 6 of the IgG type; cell-mediated reactions (T urs following exposure. agement, the EU regulatory framework for uman and animal health and the environment. To an be placed on the market. A central element in dosage, application method and amount of ice. omestic settings. Many biocidal products are re commonly available for private use by non- e general public) may occur indirectly via the pheric and residential exposure. Particular 4, pregnant women, and children. Also pets and ucts. Furthermore, exposure to biocides may vary ater, residential, occupational) of exposure, level, orised concentration of free formaldehyde is 0.2% on exceeds 0.05%. The use of formaldehyde- ys low but sufficient to inhibit microbial growth - it aldehyde generators can produce amines capable
3-IODO-2-PROPYNYL BUTYL CARBAMATE			
STYRENE	WARNING: This substance has been classified by the	e IARC as Group 2B: Possibly Carcin	ogenic to Humans.
ETHYLENE GLYCOL MONOBUTYL ETHER & STYRENE	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.		
WATER & DMDM- HYDANTOIN	No significant acute toxicological data identified in liter	rature search.	
DMDM-HYDANTOIN & 3- IODO-2-PROPYNYL BUTYL CARBAMATE	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. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested.		
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 a	available or does not fill the criteria for classification o make classification

— Data available to make classification

SECTION 12 Ecological information

Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
Water (Mopar Total Clean Trigger Spray)	Not Available	Not Available	Not Available	Not Available	Not Available
ethylene glycol monobutyl ether	Endpoint	Test Duration (hr)	Species	Value	Source
ounor	EC50	96h	Algae or other aquatic plants	720mg/l	2

	EC50	72h	Algae or other aquatic plants	623mg/l	2
	EC10(ECx)	48h	Crustacea	7.2mg/l	2
	EC50	48h	Crustacea	164mg/l	2
	LC50	96h	Fish	1250mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
water	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	96h	Algae or other aquatic plants	>1000mg/l	2
	EC50	72h	Algae or other aquatic plants	~7.9mg/l	2
DMDM-hydantoin	EC10(ECx)	72h	Algae or other aquatic plants	3.8mg/l	2
	LC50	96h	Fish	56.4- 84.8mg/L	4
	EC50	48h	Crustacea	~29.1mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	0.022mg/L	2
3-iodo-2-propynyl butyl	EC50	48h	Crustacea	0.04mg/L	5
carbamate	NOEC(ECx)	0.5h	Fish	<0.001mg/L	4
	LC50	96h	Fish	0.05- 0.089mg/L	4
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	EC50	96h	Algae or other aquatic plants	0.72mg/l	1
	EC50	72h	Algae or other aquatic plants	1.4mg/l	1
styrene	NOEC(ECx)	96h	Algae or other aquatic plants	0.063mg/l	1
	EC50	48h	Crustacea	4.7mg/l	1
	LC50	96h	Fish	3.29- 5.05mg/L	4

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)
water	LOW	LOW
DMDM-hydantoin	LOW	LOW
3-iodo-2-propynyl butyl carbamate	HIGH	HIGH
styrene	HIGH (Half-life = 210 days)	LOW (Half-life = 0.3 days)

Bioaccumulative potential

Ingredient	Bioaccumulation
ethylene glycol monobutyl ether	LOW (BCF = 2.51)
water	LOW (LogKOW = -1.38)
DMDM-hydantoin	LOW (LogKOW = -2.3729)
3-iodo-2-propynyl butyl carbamate	LOW (LogKOW = 2.4542)
styrene	LOW (BCF = 77)

Mobility in soil

Ingredient	Mobility
ethylene glycol monobutyl ether	HIGH (Log KOC = 1)
DMDM-hydantoin	LOW (Log KOC = 10)
3-iodo-2-propynyl butyl carbamate	LOW (Log KOC = 365.3)
styrene	LOW (Log KOC = 517.8)

Other adverse effects

No evidence of ozone depleting properties were found in the current literature.

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Water (Mopar Total Clean Trigger Spray)

Product / Packaging disposal	 Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. 	
	 Recycle wherever possible or consult manufacturer for recycling options. 	
	 Consult State Land Waste Authority for disposal. 	
	Bury or incinerate residue at an approved site.	
	Recycle containers if possible, or dispose of in an authorised landfill.	

Labels Required		
	Marine Pollutant	NO

Land transport (DOT): 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

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

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

Product name	Group
ethylene glycol monobutyl ether	Not Available
water	Not Available
DMDM-hydantoin	Not Available
3-iodo-2-propynyl butyl carbamate	Not Available
styrene	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
ethylene glycol monobutyl ether	Not Available
water	Not Available
DMDM-hydantoin	Not Available
3-iodo-2-propynyl butyl carbamate	Not Available
styrene	Not Available

SECTION 15 Regulatory information

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

ethylene glycol monobutyl ether is found on the following regulatory lists

- International Agency for Research on Cancer (IARC) Agents Classified by the IARC Monographs Not Classified as Carcinogenic
- US California Hazardous Air Pollutants Identified as Toxic Air Contaminants
- US Massachusetts Right To Know Listed Chemicals
- US New Jersey Right to Know Special Health Hazard Substance List (SHHSL): Carcinogens
- US New Jersey Right to Know Hazardous Substances
- US Pennsylvania Hazardous Substance List
- US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)
- US DOE Temporary Emergency Exposure Limits (TEELs)
- US EPA Integrated Risk Information System (IRIS)
- US EPCRA Section 313 Chemical List
- US New York City Community Right-to-Know: List of Hazardous Substances
- US NIOSH Recommended Exposure Limits (RELs)
- US OSHA Permissible Exposure Limits (PELs) Table Z-1
- US Toxic Substances Control Act (TSCA) Chemical Substance Inventory

water is found on the following regulatory lists

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

DMDM-hydantoin is found on the following regulatory lists

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

3-iodo-2-propynyl butyl carbamate is found on the following regulatory lists

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

- US Alaska Air Quality Control Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5
- US New Jersey Right to Know Hazardous Substances
- US DOE Temporary Emergency Exposure Limits (TEELs)
- US EPCRA Section 313 Chemical List
- US NIOSH Recommended Exposure Limits (RELs)
- US OSHA Permissible Exposure Limits (PELs) Table Z-1
- US OSHA Permissible Exposure Limits (PELs) Table Z-3

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory	
styrene is found on the following regulatory lists	
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 2A: Probably carcinogenic to humans	
US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants	
US - California Proposition 65 - Carcinogens	
US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens	
US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List	
US - Massachusetts - Right To Know Listed Chemicals	
US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Carcinogens	
US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Flammables	
US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Reactive Materials	
US - New Jersey Right to Know Hazardous Substances	
US - Pennsylvania - Hazardous Substance List	
US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)	
US Clean Air Act - Hazardous Air Pollutants	
US CWA (Clean Water Act) - List of Hazardous Substances	
US DOE Temporary Emergency Exposure Limits (TEELs)	
US EPA Integrated Risk Information System (IRIS)	
US EPCRA Section 313 Chemical List	
US National Toxicology Program (NTP) 15th Report Part B. Reasonably Anticipated to be a Human Carcinogen	
US New York City Community Right-to-Know: List of Hazardous Substances	
US NIOSH Recommended Exposure Limits (RELs)	
US OSHA Permissible Exposure Limits (PELs) Table Z-2	
US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory	

Additional Regulatory Information

Not Applicable

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 hazard categories

Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	No
Acute toxicity (any route of exposure)	No
Reproductive toxicity	No
Skin Corrosion or Irritation	No
Respiratory or Skin Sensitization	No
Serious eye damage or eye irritation	Yes
Specific target organ toxicity (single or repeated exposure)	No
Aspiration Hazard	No
Germ cell mutagenicity	No
Simple Asphyxiant	No
Hazards Not Otherwise Classified	No

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

Name	Reportable Quantity in Pounds (lb)	Reportable Quantity in kg
styrene	1000	454

US. EPCRA Section 313 Toxic Release Inventory (TRI) (40 CFR 372)

This product contains the following EPCRA section 313 chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know-Act of 1986 (40 CFR 372):

CAS No	%[weight]	Name	
111-76-2	1	ethylene glycol monobutyl ether	
55406-53-6	<0.01	3-iodo-2-propynyl butyl carbamate	
100-42-5	<0.01	styrene	
This information must be included in all SDSs that are copied and distributed for this material.			

Additional Federal Regulatory Information

Not Applicable

State Regulations

US. California Proposition 65

WARNING: This product can expose you to chemicals including styrene, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov

Additional State Regulatory Information

Not Applicable

National Inventory Status

National Inventory	Status	
Australia - AIIC / Australia Non- Industrial Use	Yes	
Canada - DSL	Yes	
Canada - NDSL	No (ethylene glycol monobutyl ether; water; DMDM-hydantoin; 3-iodo-2-propynyl butyl carbamate; styrene)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	Yes	
Japan - ENCS	Yes	
Korea - KECI	Yes	
New Zealand - NZIoC	Yes	
Philippines - PICCS	Yes	
USA - TSCA	All chemical substances in this product have been designated as TSCA Inventory 'Active'	
Taiwan - TCSI	Yes	
Mexico - INSQ	Yes	
Vietnam - NCI	Yes	
Russia - FBEPH	Yes	
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	04/23/2021
Initial Date	03/16/2018

SDS Version Summary

Version	Date of Update	Sections Updated
4.9	02/05/2021	Composition / information on ingredients - Ingredients, Identification of the substance / mixture and of the company / undertaking - Synonyms

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
- DNEL: Derived No-Effect Level
- PNEC: Predicted no-effect concentration
 MARPOL: International Convention for the Prevention of Pollution from Ships
- IMSBC: International Maritime Solid Bulk Cargoes Code
- IGC: International Gas Carrier Code
- IBC: International Bulk Chemical Code
- 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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