

The Toro Company

Chemwatch: 5198-40 Version No: 2.1.1.1

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

Issue Date: 16/12/2015 Print Date: 05/10/2018 S GHS USA EN

SECTION 1 IDENTIFICATION

Product Identifier

Product name	Toro Apple Red
Synonyms	PC9a
Proper shipping name	Aerosols, flammable, (each not exceeding 1 L capacity); Aerosols, flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses

Application is by spray atomisation from a hand held aerosol pack Paints and coatings

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

Registered company name	The Toro Company
Address	8111 Lyndale Avenue South, Bloomington MN 55420 United States
Telephone	+1-952-888-8801
Fax	+1-952-887-8258
Website	www.toro.com
Email	HealthAndSafety@toro.com

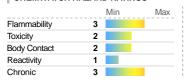
Emergency phone number

Association / Organisation	CHEMTEL
Emergency telephone numbers	1-800-255-3924
Other emergency telephone numbers	+1-813-248-0585

SECTION 2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

CHEMWATCH HAZARD RATINGS



0 = Minimum 2 = Moderate 3 = High

1 = Low

4 = Extreme



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

Aerosols Category 1, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Carcinogenicity Category 2, Reproductive Toxicity Category 1B, Specific target organ toxicity - single exposure Category 3 (narcotic effects), Specific target organ toxicity - repeated exposure Category 2

Label elements

Hazard pictogram(s)







SIGNAL WORD

DANGER

Hazard statement(s)

H222+H229	Extremely flammable aerosol; Pressurized container: may burst if heated.

H315 Causes skin irritation. Chemwatch: 5198-40 Version No: 2.1.1.1

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H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

Hazard(s) not otherwise specified

Not Applicable

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurized container: Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.

Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.

Precautionary statement(s) Storage

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 in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
67-64-1	35.21	acetone
74-98-6	15.79	propane
108-88-3	11.46	toluene
106-97-8.	9.27	<u>butane</u>
108-65-6	3.28	propylene glycol monomethyl ether acetate, alpha-isomer
108-10-1	2.15	methyl isobutyl ketone
107-87-9	1.92	methyl propyl ketone
2807-30-9	1.5	2-propoxyethanol

SECTION 4 FIRST-AID MEASURES

Description of first aid measures

▶ Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water. **Eye Contact** 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. If solids or aerosol mists are deposited upon the skin: ► Flush skin and hair with running water (and soap if available).

Skin Contact

▶ Remove any adhering solids with industrial skin cleansing cream.

- ► DO NOT use solvents
- Seek medical attention in the event of irritation.

If aerosols, fumes or combustion products are inhaled:

- ► Remove to fresh air. Inhalation
 - Lay patient down. Keep warm and rested.

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	 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	Not considered a normal route of entry. If swallowed do NOT induce vomiting. If womiting 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.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing media

SMALL FIRE:

► Water spray, dry chemical or CO2

LARGE FIRE:

Water spray or fog.

Special hazards arising from the substrate or mixture

Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result		
Special protective equipment and precautions for fire-fighters			
	► Alert Fire Brigade and tell them location and nature of hazard.		

Fire	Fighting	J

- 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.

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.

Combustion products include:

carbon dioxide (CO2)

other pyrolysis products typical of burning organic material.

Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

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.
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.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

▶ DO NOT allow clothing wet with material to stay in contact with skin

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▶ Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can

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- ▶ 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.
- Avoid smoking, naked lights or ignition sources.
- ▶ Store in original containers in approved flammable liquid storage area.
- ▶ DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- ▶ No smoking, naked lights, heat or ignition sources.
- $\,\blacktriangleright\,$ Keep containers securely sealed. Contents under pressure. ▶ Store away from incompatible materials.

Conditions for safe storage, including any incompatibilities

Suitable container

Other information

- 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

INGREDIENT DATA						
Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US NIOSH Recommended Exposure Limits (RELs)	acetone	Dimethyl ketone, Ketone propane, 2-Propanone	250 ppm / 590 mg/m3	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	acetone	Acetone	250 ppm	500 ppm	Not Available	TLV® Basis: URT & eye irr; CNS impair; BEI
US OSHA Permissible Exposure Levels (PELs) - Table Z1	acetone	Acetone	1000 ppm / 2400 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	propane	Bottled gas, Dimethyl methane, n-Propane, Propyl hydride	1000 ppm / 1800 mg/m3	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	propane	* Propane	Not Available	Not Available	Not Available	TLV® Basis: Asphyxia; See Appendix F: Minimal Oxygen Content
US OSHA Permissible Exposure Levels (PELs) - Table Z1	propane	Propane	1000 ppm / 1800 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	toluene	Methyl benzene, Methyl benzol, Phenyl methane, Toluol	100 ppm / 375 mg/m3	560 mg/m3 / 150 ppm	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	toluene	Toluene	20 ppm	Not Available	Not Available	TLV® Basis: Visual impair; female repro; pregnancy loss; BEI
US OSHA Permissible Exposure Levels (PELs) - Table Z2	toluene	Toluene	200 ppm	Not Available	300 ppm	(Z37.12-1967)
US OSHA Permissible Exposure Levels (PELs) - Table Z1	toluene	Toluene	Not Available	Not Available	Not Available	See Table Z-2
US NIOSH Recommended Exposure Limits (RELs)	butane	normal-Butane, Butyl hydride, Diethyl, Methylethylmethane [Note: Also see specific listing for Isobutane.]	800 ppm / 1900 mg/m3	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	butane	* Butane, all isomers	Not Available	1000 ppm	Not Available	TLV® Basis: CNS impair
US NIOSH Recommended Exposure Limits (RELs)	methyl isobutyl ketone	Isobutyl methyl ketone, Methyl isobutyl ketone, 4-Methyl 2-pentanone, MIBK	50 ppm / 205 mg/m3	300 mg/m3 / 75 ppm	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	methyl isobutyl ketone	Methyl isobutyl ketone	20 ppm	75 ppm	Not Available	TLV® Basis: URT irr; dizziness: headache; BEI
US OSHA Permissible Exposure Levels (PELs) - Table Z1	methyl isobutyl ketone	Hexone (Methyl isobutyl ketone)	100 ppm / 410 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	methyl propyl ketone	Ethyl acetone, Methyl propyl ketone, MPK	150 ppm / 530 mg/m3	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	methyl propyl ketone	Methyl propyl ketone	Not Available	150 ppm	Not Available	TLV® Basis: Pulm func; eye irr
US OSHA Permissible Exposure Levels (PELs) - Table Z1	methyl propyl ketone	2-Pentanone (Methyl propyl ketone)	200 ppm / 700 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

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Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
acetone	Acetone	Not Available	Not Available	Not Available
propane	Propane	Not Available	Not Available	Not Available
toluene	Toluene	Not Available	Not Available	Not Available
butane	Butane	Not Available	Not Available	Not Available

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propylene glycol monomethyl ether acetate, alpha-isomer	Propylene glycol monomethyl ether acetate, alpha-isomer; (1-Methoxypropyl-2-acetate)	Not Available	Not Available	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	Propylene glycol monomethyl ether acetate, beta-isomer; (2-Methoxypropoyl-1-acetate)	Not Available	Not Available	Not Available
methyl isobutyl ketone	Methyl isobutyl ketone; (Hexone)	75 ppm	500 ppm	3000 ppm
methyl propyl ketone	Pentanone, 2-; (Methyl propyl ketone)	150 ppm	830 ppm	5000 ppm
2-propoxyethanol	Ethylene glycol monopropyl ether; (Propyl cellosolve; Ektasolve EP)	2.2 ppm	24 ppm	140 ppm

Ingredient	Original IDLH	Revised IDLH
acetone	2,500 ppm	Not Available
propane	2,100 ppm	Not Available
toluene	500 ppm	Not Available
butane	Not Available	1,600 ppm
propylene glycol monomethyl ether acetate, alpha-isomer	Not Available	Not Available
methyl isobutyl ketone	500 ppm	Not Available
methyl propyl ketone	1,500 ppm	Not Available
2-propoxyethanol	Not Available	Not Available

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

Personal protection









Eye and face protection

- Safety glasses with side shields.
- Chemical goggles
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. 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.
- ▶ Close fitting gas tight goggles

DO NOT wear contact len

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

Other protection

No special equipment needed when handling small quantities.

OTHERWISE:

- Overalls.
- Skin cleansing cream.
- Eyewash unit.
- Do not spray on hot surfaces.

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 computergenerated selection:

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Material	СРІ
BUTYL	С
BUTYL/NEOPRENE	С
CPE	С
HYPALON	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE	С

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 5 x ES	AX-AUS / Class 1	-	AX-PAPR-AUS / Class 1
up to 25 x ES	Air-line*	AX-2	AX-PAPR-2
up to 50 x ES	-	AX-3	-
50+ x ES	-	Air-line**	-

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen

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NEOPRENE/NATURAL	С
NEOPRENE/NATURAL	C
NITRILE	С
NITRILE+PVC	С
PE/EVAL/PE	С
PVA	С
PVC	С
PVDC/PE/PVDC	С
SARANEX-23	С
SARANEX-23 2-PLY	С
TEFLON	С
VITON	С
VITON/CHLOROBUTYL	С
VITON/NEOPRENE	С
##methyl isobutyl	ketone

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

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)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on
 detecting any odours through the respirator. The odour may indicate that the mask is
 not functioning properly, that the vapour concentration is too high, or that the mask is
 not properly fitted. Because of these limitations, only restricted use of cartridge
 respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

Aerosols, in common with most vapours/ mists, should never be used in confined spaces without adequate ventilation. Aerosols, containing agents designed to enhance or mask smell, have triggered allergic reactions in predisposed individuals.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Extremely flammable liquid with aromatic odour.		
Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	-44	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	-19	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	10.9	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.7	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Not Available	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

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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

Inhale

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of

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	co-ordination, and vertigo. Inhalation of high concentrations of gas/vapour causes lung irritation with a slowing of reflexes, fatigue and inco-ordination.	coughing and nausea, central nervous depression with headache and dizziness,
	breathing zone, acting as a simple asphyxiant. This may happen with little to The use of a quantity of material in an unventilated or confined space may starting consider control of exposure by mechanical ventilation. WARNING:Intentional misuse by concentrating/inhaling contents may be	result in increased exposure and an irritating atmosphere developing. Before
Ingestion	Accidental ingestion of the material may be damaging to the health of the i Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environment	
Skin Contact	Repeated exposure may cause skin cracking, flaking or drying following not spray mist may produce discomfort Open cuts, abraded or irritated skin should not be exposed to this material Toxic effects may result from skin absorption Entry into the blood-stream, through, for example, cuts, abrasions or lesion use of the material and ensure that any external damage is suitably protect. This material can cause inflammation of the skin on contact in some perso	ns, may produce systemic injury with harmful effects. Examine the skin prior to the ed.
Eye	There is evidence that material may produce eye irritation in some persons inflammation may be expected with pain.	s and produce eye damage 24 hours or more after instillation. Severe
Chronic	There has been concern that this material can cause cancer or mutations, Harmful: danger of serious damage to health by prolonged exposure throu	ugh inhalation. riods. It can be assumed that it contains a substance which can produce severe directly caused by exposure to the material. I disorders are directly caused by human exposure to the material. tion and possible dermatitis following.
	TOXICITY	IRRITATION
Toro Apple Red	Not Available	Not Available
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 20000 mg/kg ^[2]	Eye (human): 500 ppm - irritant
	Inhalation (rat) LC50: 100.2 mg/l/8hr ^[2]	Eye (rabbit): 20mg/24hr -moderate
acetone	Oral (rat) LD50: 5800 mg/kg ^[2]	Eye (rabbit): 3.95 mg - SEVERE
	3 3	Skin (rabbit): 500 mg/24hr - mild
		Skin (rabbit):395mg (open) - mild
	TOXICITY	IRRITATION
propane	Inhalation (rat) LC50: 84.684 mg/l15 min ^[1]	Not Available
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 12124 mg/kg ^[2]	Eye (rabbit): 2mg/24h - SEVERE
	Inhalation (rat) LC50: 49 mg/l/4H ^[2]	Eye (rabbit):0.87 mg - mild
toluene	Oral (rat) LD50: 636 mg/kg ^[2]	Eye (rabbit):100 mg/30sec - mild
	Trail (rai) 2500. 000 mg/kg	Skin (rabbit):20 mg/24h-moderate
		Skin (rabbit):500 mg - moderate
	TOXICITY	IRRITATION
butane	Inhalation (rat) LC50: 658 mg/l/4H ^[2]	Not Available
	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Not Available
propylene glycol monomethyl ether acetate, alpha-isomer	Inhalation (rat) LC50: 6510.0635325 mg/l/6h ^[2]	
	Oral (rat) LD50: >5000 mg/kg ^[1]	
	TOXICITY	IRRITATION
	Oral (rat) LD50: 2080 mg/kg ^[2]	Eye (human): 200 ppm/15m
methyl isobutyl ketone	- Tai (rat) £500. 2000 mg/ng	Eye (rabbit): 40 mg - SEVERE
,,		Eye (rabbit): 500 mg/24h - mild
		Skin (rabbit): 500 mg/24h - mild
	TOXICITY	IRRITATION
methyl propyl ketone	Dermal (rabbit) LD50: 6500 mg/kg ^[2]	Skin (rabbit): 405 mg (open) mild
	Dennai (rabbit) EDDO. 0000 Mg/kg	S.S. (rabbit). Too mg (open) mila

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Inhalation (mouse) LC50: 11 mg/l/2H ^[2] Oral (rat) LD50: 1600 mg/kg ^[2] TOXICITY Dermal (rabbit) LD50: 960 mg/kg ^[2] Inhalation (rat) LC50: 1997.718 mg/l/4hourE ^[2] Eye (rabbit): 0.75 mg/24h SEVERE Inhalation (rat) LC50: 1997.718 mg/l/4hourE ^[2] Oral (rat) LD50: 3089 mg/kg ^[2] Skin (rabbit): 500 mg/24h -mild Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise sy data extracted from RTECS - Register of Toxic Effect of chemical Substances ACETONE For acetone: The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitizer, but it removes fat from the skin, and it also irritates the eye. Anima shows acetone may cause macrocytic anaemia. Studies in humans have shown that exposure to acetone at a level of 2375 mg/cubic metre has no neurobehavioural deficits. PROPANE No significant acute toxicological data identified in literature search. For toluene: Acute toxicity. Humans exposed to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis (sleepiness) and death. When inhaled or swallowed, toluene can cause severe central nervous depression, and in large doses has a narcotic effect. 60mL has caused death. Death of heart muscle fibres, liver swelling, congestion and bleed lungs and kidney injury were all flound on autosys.
2-propoxyethanol Permal (rabbit) LD50: 960 mg/kg ^[2] Eye (rabbit): 0.75 mg/24h SEVERE Inhalation (rat) LC50: 1997.718 mg/l/4hourE ^[2] Eye (rabbit): 100 mg - SEVERE Oral (rat) LD50: 3089 mg/kg ^[2] Skin (rabbit): 500 mg/24h -mild Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise sydata extracted from RTECS - Register of Toxic Effect of chemical Substances ACETONE For acetone: The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitizer, but it removes fat from the skin, and it also irritates the eye. Anima shows acetone may cause macrocytic anaemia. Studies in humans have shown that exposure to acetone at a level of 2375 mg/cubic metre has no neurobehavioural deficits. PROPANE No significant acute toxicological data identified in literature search. For toluene: Acute toxicity: Humans exposed to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis (sleepiness) and death. When inhaled or swallowed, toluene can cause severe central nervous experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis (sleepiness) and death. When inhaled or swallowed, toluene can cause severe central nervous experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis (sleepiness) and death. Death of heart muscle fibres, liver swelling, congestion and bleed depression, and in large doses has a narcotic effect. 60ml. has caused death. Death of heart muscle fibres, liver swelling, congestion and bleed
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Exposure to inhalation at a concentration of 600 parts per million for 8 hours resulted in the same and more serious symptoms including euphori of well-being), dilated pupils, convulsions and nausea. Exposure to 10000-30000 parts per million (1-3%) has been reported to cause narcosis a
For propylene glycol ethers (PGEs): Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol methyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl eacetate (DPMA) and tripropylene glycol methyl ether (TPM). Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene common toxicities associated with the lower molecular weight homologues of the ethylene series, such as adverse effects on the reproductive or developing embryo and foetus, blood or thymus gland, are not seen with the commercial-grade propylene glycol ethers. In the ethylene series, mof the terminal hydroxyl group produces and alkoxyacetic acid. The reproductive and developmental toxicities of the lower molecular weight homologues in the ethylene series are due specifically to the formation of methoxyacetic and ethoxyacetic acids. Longer chain homologues in the ethylene series are not associated with reproductive toxicity, but can cause haemolysis in sensitive species, also formation of an alkoxyacetic acid. Animal testing shows that high concentrations (for example, 0.5%) are associated with birth defects but lower exposures have not been shown to adverse effects. The beta isomer of PGMEA comprises only 10% of the commercial material; the remaining 90% is alpha isomer. Hazard appears low, but emphasizes the need for care in handling this chemical. [I.C.I] *Shin-Etsu SDS
MIBK is primarily absorbed by the lungs in animals and humans but can be absorbed by the skin, stomach and gut. If inhaled, it may be found in t liver, lung, vitreous fluid, kidney and blood. Oral and respiratory routes of exposure are of minimal effect with changes seen only in the liver and kidnes not cause genetic damage or harm the foetus or offspring, and has low toxicity to aquatic organisms.
WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce
2-PROPOXYETHANOL 3-PROPOXYETHANOL 4-PROPOXYETHANOL 4-PROPOXYETHANOL 4-PROPOXYETHANOL 4-PROPOXYETHANOL 5-PROPOXYETHANOL 5-PROPOXYETHANOL 5-PROPOXYETHANOL 6-PROPOXYETHANOL 6-PROPOXYETH
ACETONE & TOLUENE & METHYL ISOBUTYL KETONE & METHYL PROPYL KETONE & METHYL PROPYL KETONE & METHYL PROPYL KETONE & METHYL PROPYL KETONE Calling and thickening of the skin.
& 2-PROPOXYETHANOL
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 know reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for dia RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within n hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, metallenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RAD: asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance.
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Respiratory or Skin sensitisation

Mutagenicity

STOT - Repeated Exposure

Aspiration Hazard

Legend:

X − Data available but does not fill the criteria for classification
 ✓ − Data available to make classification

Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Toro Apple Red	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	>100mg/L	4
acetone	EC50	48	Crustacea	>100mg/L	4
	EC50	96	Algae or other aquatic plants	20.565mg/L	4
	NOEC	96	Algae or other aquatic plants	4.950mg/L	4
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
propane	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
	LC50	96	Fish	0.0073mg/L	4
	EC50	48	Crustacea	3.78mg/L	5
toluene	EC50	72	Algae or other aquatic plants	12.5mg/L	4
	BCF	24	Algae or other aquatic plants	10mg/L	4
	NOEC	168	Crustacea	0.74mg/L	5
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
butane	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
	LC50	96	Fish	=100mg/L	1
oropylene glycol monomethyl ether acetate, alpha-isomer	EC50	48	Crustacea	=408mg/L	1
ctrici acctate, aipria-isomer	EC0	24	Crustacea	=500mg/L	1
	NOEC	336	Fish	47.5mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
	LC50	96	Fish	>179mg/L	2
methyl isobutyl ketone	EC50	48	Crustacea	=170mg/L	1
	EC50	96	Algae or other aquatic plants	=400mg/L	1
	NOEC	504	Crustacea	30mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
	LC50	96	Fish	1240mg/L	4
methyl propyl ketone	EC50	48	Crustacea	>110mg/L	2
	EC50	72	Algae or other aquatic plants	>150mg/L	2
	NOEC	72	Algae or other aquatic plants	73.77mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
2-propoxyethanol	EC50	72	Algae or other aquatic plants	>100mg/L	2
	NOEC	72	Algae or other aquatic plants	>=100mg/L	2

Legend:

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

DO NOT discharge into sewer or waterways

Persistence and degradability

Ingredient Persistence: Water/Soil	Persistence: Air
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Toro Apple Red

acetone	LOW (Half-life = 14 days)	MEDIUM (Half-life = 116.25 days)
propane	LOW	LOW
toluene	LOW (Half-life = 28 days)	LOW (Half-life = 4.33 days)
butane	LOW	LOW
propylene glycol monomethyl ether acetate, alpha-isomer	LOW	LOW
methyl isobutyl ketone	HIGH (Half-life = 7001 days)	LOW (Half-life = 1.9 days)
methyl propyl ketone	LOW	LOW
2-propoxyethanol	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
acetone	LOW (BCF = 0.69)
propane	LOW (LogKOW = 2.36)
toluene	LOW (BCF = 90)
butane	LOW (LogKOW = 2.89)
propylene glycol monomethyl ether acetate, alpha-isomer	LOW (LogKOW = 0.56)
methyl isobutyl ketone	LOW (LogKOW = 1.31)
methyl propyl ketone	LOW (LogKOW = 0.91)
2-propoxyethanol	LOW (LogKOW = 0.0755)

Mobility in soil

Ingredient	Mobility
acetone	HIGH (KOC = 1.981)
propane	LOW (KOC = 23.74)
toluene	LOW (KOC = 268)
butane	LOW (KOC = 43.79)
propylene glycol monomethyl ether acetate, alpha-isomer	HIGH (KOC = 1.838)
methyl isobutyl ketone	LOW (KOC = 10.91)
methyl propyl ketone	LOW (KOC = 7.059)
2-propoxyethanol	HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

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

SECTION 14 TRANSPORT INFORMATION

Labels Required



Land transport (DOT)

UN number	1950
UN proper shipping name	Aerosols, flammable, (each not exceeding 1 L capacity); Aerosols, flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)
Transport hazard class(es)	Class 2.1 Subrisk Not Applicable
Packing group	Not Applicable

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Environmental hazard	Not Applicable
Special precautions for user	Hazard Label 2.1
	Special provisions N82

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

Sea transport (IMDG-Code / GGVSee)

UN number	1950		
UN proper shipping name	AEROSOLS		
Transport hazard class(es)	IMDG Class 2.1 IMDG Subrisk Not Applicable		
Packing group	Not Applicable		
Environmental hazard	Not Applicable		
Special precautions for user	EMS Number F-D, S-U Special provisions 63 190 277 327 344 381 959 Limited Quantities 1000ml		

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

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

ACETONE(67-64-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS	
US - Alaska Limits for Air Contaminants	US - Washington Permissible exposure limits of air contaminants
US - California Permissible Exposure Limits for Chemical Contaminants	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US - Hawaii Air Contaminant Limits	US ACGIH Threshold Limit Values (TLV)
US - Idaho - Limits for Air Contaminants	US ACGIH Threshold Limit Values (TLV) - Carcinogens
US - Massachusetts - Right To Know Listed Chemicals	US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)
US - Michigan Exposure Limits for Air Contaminants	US Drug Enforcement Administration (DEA) List I and II Regulated Chemicals
US - Minnesota Permissible Exposure Limits (PELs)	US EPA Carcinogens Listing
US - Oregon Permissible Exposure Limits (Z-1)	US NIOSH Recommended Exposure Limits (RELs)
US - Pennsylvania - Hazardous Substance List	US OSHA Permissible Exposure Levels (PELs) - Table Z1
US - Rhode Island Hazardous Substance List	US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants	US TSCA Chemical Substance Inventory - Interim List of Active Substances
US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air	US TSCA Section 4/12 (b) - Sunset Dates/Status

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

US - Alaska Limits for Air Contaminants	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
US - California Permissible Exposure Limits for Chemical Contaminants	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
US - Hawaii Air Contaminant Limits	Contaminants
US - Idaho - Limits for Air Contaminants	US - Washington Permissible exposure limits of air contaminants
US - Massachusetts - Right To Know Listed Chemicals	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US - Michigan Exposure Limits for Air Contaminants	US ACGIH Threshold Limit Values (TLV)
US - Minnesota Permissible Exposure Limits (PELs)	US NIOSH Recommended Exposure Limits (RELs)
US - Oregon Permissible Exposure Limits (Z-1)	US OSHA Permissible Exposure Levels (PELs) - Table Z1
US - Pennsylvania - Hazardous Substance List	US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants
US - Rhode Island Hazardous Substance List	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	US TSCA Chemical Substance Inventory - Interim List of Active Substances

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

Issue Date: 16/12/2015 Version No: 2.1.1.1 Print Date: 05/10/2018

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC US - Alaska Limits for Air Contaminants US - California - Proposition 65 - Priority List for the Development of MADLs for Chemicals Causing Reproductive Toxicity

US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs)

US - California Permissible Exposure Limits for Chemical Contaminants

US - California Proposition 65 - Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity

US - California Proposition 65 - Reproductive Toxicity

US - Hawaii Air Contaminant Limits

US - Idaho - Acceptable Maximum Peak Concentrations

US - Idaho - Limits for Air Contaminants

US - Massachusetts - Right To Know Listed Chemicals

US - Michigan Exposure Limits for Air Contaminants

US - Minnesota Permissible Exposure Limits (PELs)

US - Oregon Permissible Exposure Limits (Z-1)

US - Oregon Permissible Exposure Limits (Z-2)

US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List

US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants

US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants

US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air

US - Washington Permissible exposure limits of air contaminants

US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values

US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants

US - Wyoming Toxic and Hazardous Substances Table Z-2 Acceptable ceiling concentration, Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift

US ACGIH Threshold Limit Values (TLV)

US ACGIH Threshold Limit Values (TLV) - Carcinogens

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 CWA (Clean Water Act) - Priority Pollutants

US CWA (Clean Water Act) - Toxic Pollutants

US Drug Enforcement Administration (DEA) List I and II Regulated Chemicals

US EPA Carcinogens Listing

US EPCRA Section 313 Chemical List

US NIOSH Recommended Exposure Limits (RELs)

US Office of Environmental Health Hazard Assessment Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for

Chemicals Causing Reproductive Toxicity

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US OSHA Permissible Exposure Levels (PELs) - Table Z2

US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

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

US - Alaska Limits for Air Contaminants US - California Permissible Exposure Limits for Chemical Contaminants

US - Hawaii Air Contaminant Limits

US - Massachusetts - Right To Know Listed Chemicals

US - Michigan Exposure Limits for Air Contaminants

US - Minnesota Permissible Exposure Limits (PELs)

US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List

US - Rhode Island Hazardous Substance List

US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants

US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants

US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants

US - Washington Permissible exposure limits of air contaminants

US ACGIH Threshold Limit Values (TLV)

US NIOSH Recommended Exposure Limits (RELs) US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-ISOMER(108-65-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs)

US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs)

US - California Permissible Exposure Limits for Chemical Contaminants

US - Pennsylvania - Hazardous Substance List US AIHA Workplace Environmental Exposure Levels (WEELs) US Clean Air Act - Hazardous Air Pollutants

US EPCRA Section 313 Chemical List

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

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

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

US - Alaska Limits for Air Contaminants

US - California Permissible Exposure Limits for Chemical Contaminants

US - California Proposition 65 - Carcinogens

US - California Proposition 65 - Reproductive Toxicity

US - Hawaii Air Contaminant Limits

US - Idaho - Limits for Air Contaminants

US - Massachusetts - Right To Know Listed Chemicals

US - Michigan Exposure Limits for Air Contaminants

US - Minnesota Permissible Exposure Limits (PELs)

US - Oregon Permissible Exposure Limits (Z-1)

US - Pennsylvania - Hazardous Substance List

US - Rhode Island Hazardous Substance List

US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants

US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants

US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air

US - Washington Permissible exposure limits of air contaminants

US - Washington Toxic air pollutants and their ASIL. SQER and de minimis emission values

US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants

US ACGIH Threshold Limit Values (TLV)

US ACGIH Threshold Limit Values (TLV) - Carcinogens

US Clean Air Act - Hazardous Air Pollutants

US Drug Enforcement Administration (DEA) List I and II Regulated Chemicals

US EPA Carcinogens Listing

US EPCRA Section 313 Chemical List

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

US TSCA Section 4/12 (b) - Sunset Dates/Status

METHYL PROPYL KETONE(107-87-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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Toro Apple Red

US - Alaska Limits for Air Contaminants	US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	
US - California Permissible Exposure Limits for Chemical Contaminants	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants	
US - Hawaii Air Contaminant Limits	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air	
US - Idaho - Limits for Air Contaminants	Contaminants	
US - Massachusetts - Right To Know Listed Chemicals	US - Washington Permissible exposure limits of air contaminants	
US - Michigan Exposure Limits for Air Contaminants	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants	
US - Minnesota Permissible Exposure Limits (PELs)	US ACGIH Threshold Limit Values (TLV)	
US - Oregon Permissible Exposure Limits (Z-1)	US NIOSH Recommended Exposure Limits (RELs)	
US - Pennsylvania - Hazardous Substance List	US OSHA Permissible Exposure Levels (PELs) - Table Z1	
US - Rhode Island Hazardous Substance List	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory	
	US TSCA Chemical Substance Inventory - Interim List of Active Substances	

2-PROPOXYETHANOL(2807-30-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs)

US - Pennsylvania - Hazardous Substance List

US Clean Air Act - Hazardous Air Pollutants

US EPCRA Section 313 Chemical List

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory US TSCA Chemical Substance Inventory - Interim List of Active Substances

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

Flammable (Gases, Aerosols, Liquids, or Solids)	Yes
Gas under pressure	No
Explosive	No
Self-heating 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	Yes
Acute toxicity (any route of exposure)	No
Reproductive toxicity	Yes
Skin Corrosion or Irritation	Yes
Respiratory or Skin Sensitization	No
Serious eye damage or eye irritation	Yes
Specific target organ toxicity (single or repeated exposure)	Yes
Aspiration Hazard	No
Germ cell mutagenicity	No
Simple Asphyxiant	No

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

Name	Reportable Quantity in Pounds (lb)	Reportable Quantity in kg
Acetone	5000	2270
Benzene, methyl-	1000	454
Hexone	5000	2270

State Regulations

US. CALIFORNIA PROPOSITION 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

\parallel US - CALIFORNIA PROPOSITION 65 - CARCINOGENS & REPRODUCTIVE TOXICITY (CRT): LISTED SUBSTANCE

Toluene, Methyl isobutyl ketone Listed

National Inventory Status

•		
National Inventory	Status	
Australia - AICS	Υ	
Canada - DSL	Y	
Canada - NDSL	N (toluene; propylene glycol monomethyl ether acetate, alpha-isomer; methyl propyl ketone; acetone; butane; 2-propoxyethanol; methyl isobutyl ketone; propane)	
China - IECSC	Υ	

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Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	Υ
Korea - KECI	Υ
New Zealand - NZIoC	Υ
Philippines - PICCS	Y
USA - TSCA	Υ
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Revision Date	16/12/2015
Initial Date	Not Available

Other information

Ingredients with multiple cas numbers

Name	CAS No
propylene glycol monomethyl ether acetate, alpha-isomer	108-65-6, 84540-57-8, 142300-82-1

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

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

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