## SAFETY DATA SHEET



## 1. Identification

1. Identification			
Product identifier	Gunk Windshield Washer Concentrate with Anti-Freeze		
Other means of identification			
SDS number	M549		
Part No.	M549, M540		
Tariff code	2905.11.0000		
Recommended use	Not available.		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/	Distributor information		
Manufacturer			
Company name Address	RSC Chemical Solutions 600 Radiator Road Indian Trail, NC 28079 United States		
Telephone	Customer Service: Technical:	(704) 821-764 (704) 684-181	
Website E-mail	www.rscbrands.com Not available.		
Emergency phone number	Emergency Telephone: Emergency Contact:	(303) 623-571 RMPDC (877-	
2. Hazard(s) identification			
Physical hazards	Flammable liquids		Category 2
Health hazards	Acute toxicity, oral		Category 3
	Acute toxicity, dermal		Category 3
	Acute toxicity, inhalation		Category 3
	Serious eye damage/eye irritati	on	Category 2A
	Reproductive toxicity		Category 2
	Specific target organ toxicity, si	ngle exposure	Category 1
	Specific target organ toxicity, re exposure	epeated	Category 1
Environmental hazards	Hazardous to the aquatic environ hazard	onment, acute	Category 3
OSHA defined hazards	Not classified.		
Label elements			

Signal word Hazard statement Danger

Highly flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Causes serious eye irritation. Toxic if inhaled. Suspected of damaging fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure. Harmful to aquatic life.

Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If swallowed: Immediately call a poison center/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor. Rinse mouth. If eye irritation persists: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.
Supplemental information	3.02% of the mixture consists of component(s) of unknown acute oral toxicity. 3.49% of the mixture consists of component(s) of unknown acute dermal toxicity. 3.02% of the mixture consists of component(s) of unknown acute inhalation toxicity. 51.27% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

## 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
METHANOL		67-56-1	40 - < 50
AMMONIUM HYDROXIDE		1336-21-6	< 1
Other components below reportable lev	vels		50 - < 60

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Most important symptoms/effects, acute and delayed	Dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

## 5. Fire-fighting measures

Suitable extinguishing media	Alcohol resistant foam. Water fog. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly flammable liquid and vapor.

### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Following product recovery, flush area with water.
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
	For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep out of the reach of children. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

### 8. Exposure controls/personal protection

#### **Occupational exposure limits**

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
AMMONIUM HYDROXIDE (CAS 1336-21-6)	PEL	35 mg/m3	
		50 ppm	
METHANOL (CAS 67-56-1)	PEL	260 mg/m3	
		200 ppm	
US. ACGIH Threshold Limit Values	6		
Components	Туре	Value	
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	35 ppm	
	TWA	25 ppm	
METHANOL (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	
US. NIOSH: Pocket Guide to Chem	ical Hazards		
Components	Туре	Value	
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	27 mg/m3	
		35 ppm	
	TWA	18 mg/m3	
		25 ppm	
METHANOL (CAS 67-56-1)	STEL	325 mg/m3	
		250 ppm	
	TWA	260 mg/m3	

iological limit values				
ACGIH Biological Exposure Components	alue	Determinant	Specimen	Sampling Time
METHANOL (CAS 67-56-1)	15 mg/l	Methanol	Urine	*
* - For sampling details, pleas	se see the source doo	ument.		
xposure guidelines				
US - California OELs: Skin	designation			
METHANOL (CAS 67-56	δ-1)	Can be	e absorbed throu	gh the skin.
US - Minnesota Haz Subs: \$	Skin designation app	olies		
METHANOL (CAS 67-56	6-1)	Skin d	esignation applie	S.
US - Tennessee OELs: Skir	designation			
METHANOL (CAS 67-56			e absorbed throu	gh the skin.
US ACGIH Threshold Limit	•			
METHANOL (CAS 67-56	·		e absorbed throu	gh the skin.
US NIOSH Pocket Guide to		•		
METHANOL (CAS 67-56			e absorbed throu	-
Appropriate engineering Controls	changes per hour) applicable, use pro maintain airborne le	should be used. Ve cess enclosures, lo evels below recomr ain airborne levels to	ntilation rates sh cal exhaust vent nended exposure o an acceptable	Good general ventilation (typically 10 air ould be matched to conditions. If ilation, or other engineering controls to e limits. If exposure limits have not been level. Provide eyewash station. Eye wash
ndividual protection measures				
Eye/face protection	Chemical respirato	r with organic vapo	cartridge and fu	Il facepiece.
Skin protection				
Hand protection	Wear appropriate c supplier.	hemical resistant g	loves. Suitable g	loves can be recommended by the glove
Other	Wear appropriate o	hemical resistant c	othing. Use of a	n impervious apron is recommended.
Respiratory protection	Chemical respirato	r with organic vapo	cartridge and fu	Il facepiece.
Thermal hazards	Wear appropriate t	hermal protective cl	othing, when neo	cessary.
General hygiene considerations	hygiene measures,	such as washing a	fter handling the	Irink. Always observe good personal material and before eating, drinking, and equipment to remove contaminants.

## 9. Physical and chemical properties

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Appearance	Liquid. Clear.
Physical state	Liquid.
Form	Liquid.
Color	Blue
Odor	Ammoniacal.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	-144.04 °F (-97.8 °C) estimated
Initial boiling point and boiling	148.46 °F (64.7 °C) estimated
range	
Flash point	57.0 °F (13.9 °C) Tag Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or expl	osive limits
Flammability limit - lower (%)	7.3 % estimated
Flammability limit - upper (%)	36 % estimated
Explosive limit - lower (%)	Not available.

Explosive limit - upper (%)	Not available.
Vapor pressure	84.65 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	464 °F (240 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	7.25 lbs/gal
Explosive properties	Not explosive.
Flammability class	Flammable IB estimated
Oxidizing properties	Not oxidizing.
Percent volatile	96.51 % estimated
Specific gravity	0.87
VOC (Weight %)	48.14 %

## 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

## 11. Toxicological information

#### Information on likely routes of exposure

Inhalation	Toxic if inhaled. May cause damage to organs by inhalation. May cause damage to organs through prolonged or repeated exposure by inhalation.
Skin contact	Toxic in contact with skin.
Eye contact	Causes serious eye irritation.
Ingestion	Toxic if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Headache. Dizziness. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

#### Information on toxicological effects

Acute toxicity	Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed.		
Components	Species	Test Results	
AMMONIUM HYDROXIDE (CAS 1336-21-6)			
Acute			
Oral			
LD50	Rat	350 mg/kg	
METHANOL (CAS 67-56-	1)		
Acute			
Dermal			
LD50	Rabbit	15800 mg/kg	

Components	Species	Test Results		
Inhalation				
LC50	Cat	85.41 mg/l, 4.5 Hours		
		43.68 mg/l, 6 Hours		
	Rat	64000 ppm, 4 Hours		
		87.5 mg/l, 6 Hours		
Oral				
LD50	Dog	8000 mg/kg		
	Monkey	2 g/kg		
	Mouse	7300 mg/kg		
	Rabbit	14.4 g/kg		
	Rat	5628 mg/kg		
* Estimates for product may I	be based on additional component data not	shown.		
Skin corrosion/irritation	•	Prolonged skin contact may cause temporary irritation.		
Serious eye damage/eye irritation	Causes serious eye irritation.			
Respiratory or skin sensitizatio	n			
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.			
Skin sensitization	This product is not expected to cause skin sensitization.			
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.			
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.			
OSHA Specifically Regulate	ed Substances (29 CFR 1910.1001-1050)			
Not listed.				
Reproductive toxicity	Suspected of damaging fertility or the unborn child.			
Specific target organ toxicity - single exposure	Causes damage to organs.			
Specific target organ toxicity - repeated exposure	Causes damage to organs through prolonged or repeated exposure.			
Aspiration hazard	Not an aspiration hazard.			
Chronic effects	Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.			
12. Ecological information	n			
Ecotoxicity	Harmful to aquatic life			

Components		Species	Test Results
AMMONIUM HYDROXI	DE (CAS 1336-2	1-6)	
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affini	s) 15 mg/l, 96 hours
METHANOL (CAS 67-56	6-1)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promela	s) > 100 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

## **Bioaccumulative potential**

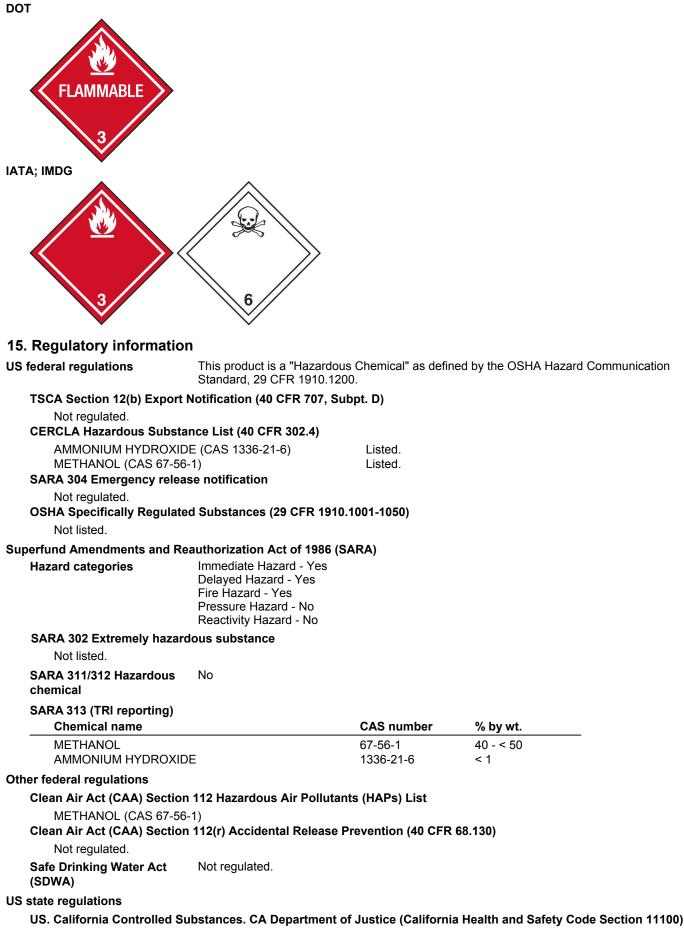
Partition coefficient n-octan METHANOL	ol / water (log Kow) -0.77	
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

## 13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

DOT	
UN number	UN1230
UN proper shipping name	Methanol, solution (METHANOL RQ = 10363 LBS)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB2, T7, TP2
Packaging exceptions	150
Packaging non bulk	202
Packaging bulk	242
ΙΑΤΑ	
UN number	UN1230
UN proper shipping name	Methanol solution (METHANOL)
Transport hazard class(es)	
Class	3
Subsidiary risk	6.1(PGI, II)
Packing group	II
Environmental hazards	No.
ERG Code	3L
	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.
IMDG	, nowed.
UN number	UN1230
UN proper shipping name	METHANOL SOLUTION (METHANOL)
Transport hazard class(es)	
Class	3
Subsidiary risk	6.1(PGI, II)
Packing group	
Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-D
	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not established.
Annex II of MARPOL 73/78 and	
the IBC Code	



Not listed.

# US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

METHANOL (CAS 67-56-1)

US. Massachusetts RTK - Substance List AMMONIUM HYDROXIDE (CAS 1336-21-6) METHANOL (CAS 67-56-1)

US. New Jersey Worker and Community Right-to-Know Act AMMONIUM HYDROXIDE (CAS 1336-21-6) METHANOL (CAS 67-56-1)

- US. Pennsylvania Worker and Community Right-to-Know Law AMMONIUM HYDROXIDE (CAS 1336-21-6) METHANOL (CAS 67-56-1)
- US. Rhode Island RTK AMMONIUM HYDROXIDE (CAS 1336-21-6) METHANOL (CAS 67-56-1)

#### US. California Proposition 65

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

#### US - California Proposition 65 - CRT: Listed date/Developmental toxin

METHANOL (CAS 67-56-1)

Listed: March 16, 2012

#### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date	04-09-2015
Version #	01
HMIS® ratings	Health: 4* Flammability: 3 Physical hazard: 0
NFPA ratings	Health: 4 Flammability: 3 Instability: 0
NFPA ratings	4 0

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.