



CHEMICAL PRODUCT SAFETY DATA SHEET

Prepared in accordance with GB/T 16483 and GB/T 17519.

Company name: CRC Industries Trading (Shanghai) Co., Ltd. Product name: Water Based Silicone

Issue date: 10-21-2016

Version #: 01

SDS No: -

1. Chemical product and company identification

Product name	Water Based Silicone
Product code	PR03035
Company name	CRC Industries Trading (Shanghai) Co., Ltd.
Address	Room 2408, No. 488 South Wuning Road Jingan District - 200042 Shanghai, PR China
General Information	+86 (0) 21 6236 6035
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Website	www.crcindustries.cn

Recommended use and Limitations on use

Recommended use	Silicone-based multi-purpose lubricant
Issue date	10-21-2016

2. Hazards identification

Emergency overview	Aerosol. CONTENTS UNDER PRESSURE. Pressurized container may rupture when exposed to heat or flame.
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GHS-classification

Physical hazards	Aerosols	Category 3
Health hazards	Not classified.	
Environmental hazards	Not classified.	
Other hazards which do not result in classification	Not classified.	

Label elements

Pictograms None.

GHS-labeling

Signal word Warning

Hazard statement Pressurized container: May burst if heated.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not pierce or burn, even after use. Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Physical and chemical hazards The product is stable and non-reactive under normal conditions of use, storage and transport.

Health hazards Direct contact with eyes may cause temporary irritation.

Environmental hazards The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Supplemental information

When heated to temperature above 300°F/150°C in the presence of air, product may form formaldehyde vapors.

3. Composition/information on ingredients

Substance/mixture	Mixture		
Chemical name	Concentration (%)	CAS Number	
water	70 - 80	7732-18-5	

Chemical name

liquefied petroleum gas	10 - 20	68476-86-8
white mineral oil (petroleum)	10 - 20	8042-47-5
polydimethylsiloxane	1 - 3	63148-62-9
ammonia	< 0.2	7664-41-7
sodium nitrite	< 0.2	7632-00-0

4. First aid measures

Inhalation	If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	In the unlikely event of swallowing contact a physician or poison control center. 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.
Most important symptoms and health effects	Direct contact with eyes may cause temporary irritation.
Expected acute symptoms and delayed symptoms	Direct contact with eyes may cause temporary irritation.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Extinguishing media	Foam. Dry chemicals. Carbon dioxide (CO ₂).
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards	During fire, gases hazardous to health may be formed. When heated to temperature above 300°F/150°C in the presence of air, product may form formaldehyde vapors.
Special fire fighting procedures	Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up.
Protection of fire-fighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
General fire hazards	Pressurized container may rupture when exposed to heat or flame.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

For emergency responders Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

Clean-up methods and materials and containment measures Stop leak if you can do so without risk. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Prevention of secondary hazards Not available.

7. Handling and storage

Handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. For product usage instructions, please see the product label.

Storage

Level 1 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Exposure limits

China OELs. Occupational Exposure Limits for Hazardous Agents in the Workplace, Chemical Hazardous Agents (GBZ 2.1-2007)

Components	Type	Value
ammonia (CAS 7664-41-7)	PC-STEL	30 mg/m ³
	PC-TWA	20 mg/m ³

Biological limit values

No biological exposure limits noted for the ingredient(s).

Control parameters

Follow standard monitoring procedures.

Engineering measures

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Respiratory protection

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

Hand protection

Wear protective gloves such as: Neoprene. Butyl rubber.

Eye protection

Wear safety glasses with side shields (or goggles).

Skin and body protection

Wear suitable protective clothing.

Hygiene measures

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state

Liquid.

Form

Aerosol.

Color

Creamy white.

Odor

Mild. Mineral oil.

pH

9.7

Melting point/freezing point

32 °F (0 °C) estimated

Boiling point, initial boiling point, and boiling range

212 °F (100 °C) estimated

Flash point

None (Tag Closed Cup)

Flammability limit - lower (%)

16 % estimated

Flammability limit - upper (%)

25 % estimated

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

520.8 hPa estimated

Vapor density	Not available.
Relative density	0.94 estimated
Density	Not available.
Solubility(ies)	
Solubility (water)	Dispersible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	617 °F (325 °C) estimated
Decomposition temperature	Not available.
Evaporation rate	Slow.
Other data	
Percent volatile	97.1 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat, flames and sparks. Contact with incompatible materials. When heated to temperature above 300°F/150°C in the presence of air, product may form formaldehyde vapors.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Sulfur oxides. Nitrogen oxides (NOx). Silica. Formaldehyde.

11. Toxicological information

Acute toxicity Expected to be a low hazard for usual industrial or commercial handling by trained personnel. Not known.

Components	Species	Test Results
ammonia (CAS 7664-41-7)		
Acute		
Inhalation		
LC50	Rat	2000 ppm, 4 Hours
Oral		
LD50	Rat	350 mg/kg
polydimethylsiloxane (CAS 63148-62-9)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 10000 mg/kg
sodium nitrite (CAS 7632-00-0)		
Acute		
Inhalation		
LC50	Rat	5.5 mg/m ³ , 4 hours
Oral		
LD50	Rat	88 mg/kg
white mineral oil (petroleum) (CAS 8042-47-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg

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

Routes of exposure Inhalation.

Symptoms	Direct contact with eyes may cause temporary irritation.
Skin corrosion/irritation	Repeated exposure may cause skin dryness or cracking.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory sensitization	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**IARC Monographs. Overall Evaluation of Carcinogenicity**

white mineral oil (petroleum) (CAS 8042-47-5) 3 Not classifiable as to carcinogenicity to humans.

Toxic to reproduction	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity following single exposure	Not classified.
Specific target organ toxicity following repeated exposure	Not classified.
Aspiration hazard	Based on available data, the classification criteria are not met.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information**Ecotoxicological data**

Components	Species	Test Results
ammonia (CAS 7664-41-7)		
Aquatic		
Fish	LC50 Chinook salmon (<i>Oncorhynchus tshawytscha</i>)	0.43 - 0.47 mg/l, 96 hours
polydimethylsiloxane (CAS 63148-62-9)		
Aquatic		
Fish	LC50 Channel catfish (<i>Ictalurus punctatus</i>)	2.36 - 4.15 mg/l, 96 hours
sodium nitrite (CAS 7632-00-0)		
Aquatic		
Crustacea	EC50 Greasyback shrimp (<i>Metapenaeus ensis</i>)	16.14 - 26.61 mg/l, 48 hours
Fish	LC50 Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>)	0.19 mg/l, 96 hours
white mineral oil (petroleum) (CAS 8042-47-5)		
Aquatic		
<i>Acute</i>		
Fish	LC50 Fish	> 10000 mg/l, 96 hours

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

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability**Bioaccumulation****Bioaccumulative potential****Octanol/water partition coefficient log Kow**

sodium nitrite -3.7
white mineral oil (petroleum) > 4, log Pow

Mobility in soil This product is miscible in water.

Other hazardous effects The product contains volatile organic compounds which have a photochemical ozone creation potential.

13. Disposal considerations

Residual waste 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. Do not re-use empty containers.
Local disposal regulations	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. 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.

14. Transport information

CNDG

UN number	UN1950
UN proper shipping name	AEROSOLS, Limited Quantity
Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Packing group	-
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number	UN1950
UN proper shipping name	Aerosols, non-flammable, Limited Quantity
Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	No.
ERG Code	2L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Other information

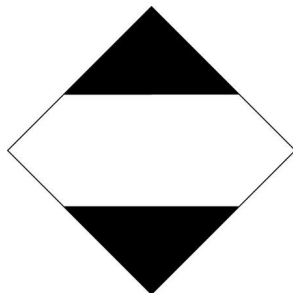
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

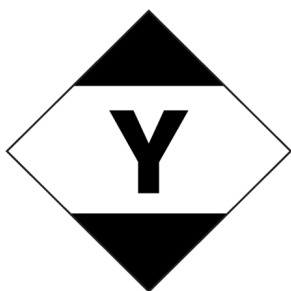
UN number	UN1950
UN proper shipping name	AEROSOLS, Limited Quantity
Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

CNDG; IMDG



IATA



15. Regulatory information

Inventory of Existing Chemical Substances in China

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	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).

Applicable regulations

This safety data sheet conforms to the following laws, regulations and standards:
 Regulations on the Control over Safety of Dangerous Chemicals
 Regulations on Labor Protection in Workplaces Where Toxic Products Are Used
 Measures for the Safe Use of Chemicals in Workplaces
 Safety Data Sheet for Chemical Products - Content and Order of Sections (GB/T 16483-2008)
 General Rules for Preparation of Precautionary Labels for Chemicals (GB15258-2009)
 Packing Symbol of Dangerous Goods(GB190-2009)
 Packing - Pictorial Marking for Handling of Goods (GB/T191-2009)

General Rule For Classification and Hazard Communication of Chemicals (GB 13690-2009) and Catalog of Hazardous Chemicals

ammonia (CAS 7664-41-7)
 sodium nitrite (CAS 7632-00-0)

Highly Toxic Chemicals List

ammonia (CAS 7664-41-7)

Occupational exposure limits for hazardous agents in the workplace (GBZ 2.1-2007)

ammonia (CAS 7664-41-7)

National Catalogue of Hazardous Wastes

white mineral oil (petroleum) (CAS 8042-47-5)

Restricted Import/Export Toxic Chemical List (MEP and GCA Announcement No. 2008-66, Dec. 1, 2008, amended through MEP and Customs Notice No. 2013-85, December 30, 2013)

Not regulated.

Identification of Major Hazard Installations for Hazardous Chemicals (GB18218-2009)

ammonia (CAS 7664-41-7)

List Of Priority Management of Hazardous Chemicals

ammonia (CAS 7664-41-7)

Classification and code of dangerous goods (GB 6944-2012)

Regulated.

List of Dangerous Goods (GB 12268-2005)

Regulated.

The Principle of Classification of Transport Packaging Groups of Dangerous Goods (GB/T15098-2008)

Regulated.

General Specifications for Transport Packages of Dangerous Goods (GB 12463-2009)

Regulated.

Regulations on Road Transport of Dangerous Goods

Regulated.

Regulations on Rail Road Transport of Dangerous Goods

Regulated.

UN Recommendations on the Transport of Dangerous Goods (UN RTDG)

Regulated.

16. Other information

References

EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents

Further information

CRC # 696A

Disclaimer

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