



CHEMICAL PRODUCT SAFETY DATA SHEET

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

Product name: SP-350 Corrosion Inhibitor (aerosol)

Issue date: 01-22-2019

Version #: 01

SDS No: -

SECTION 1 Chemical product and company identification

Chinese name of chemical	SP-350 缓蚀剂 (气溶胶)
English name of chemical	SP-350 Corrosion Inhibitor (aerosol)
Product Code	No. PR03262 (Item# 1007712)
Manufactured or sold by:	
Company name	CRC Industries Trading (Shanghai) Co., Ltd.
Address	Room 1710, No. 488 South Wuning Road Jingan District - 200042 Shanghai, PR China
General Information	+86 21 6236 6035
24-Hour Emergency	+86 532 83889090
Website	www.crcindustries.cn

Recommended use and Limitations on use

Recommended use	Corrosion Inhibitor
Issue date	01-22-2019

SECTION 2 Hazards identification

Emergency overview	Aerosol. CONTENTS UNDER PRESSURE. Pressurized container may rupture when exposed to heat or flame. May be fatal if swallowed and enters airways. May be harmful in contact with skin. May cause drowsiness and dizziness. Causes eye irritation. Causes skin irritation. Dangerous for the environment if discharged into watercourses.
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Hazard categories

Physical hazards	Aerosols	Category 1
Health hazards	Acute toxicity, dermal	Category 5
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2B
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 3

Label elements

Pictograms



Signal word

Danger

Hazard statement

H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H320	Causes eye irritation.
H336	May cause drowsiness or dizziness.
H401	Toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention

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 Do not pierce or burn, even after use.
 P264 Wash thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P331 Do NOT induce vomiting.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P332 + P313 If skin irritation occurs: Get medical advice/attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
 P312 Call a POISON CENTER/doctor if you feel unwell.

Storage

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

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Physical and chemical hazards

Extremely flammable aerosol. The product is stable and non-reactive under normal conditions of use, storage and transport.

Health hazards

Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. May be harmful in contact with skin. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful. Causes skin irritation. Causes eye irritation.

Environmental hazards

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Supplemental information

None.

SECTION 3 Composition/information on ingredients

Substance/mixture	Mixture		
Chemical name		Concentration (%)	CAS Number
distillates (petroleum), hydrotreated light		40 - 50	64742-47-8
naphtha (petroleum), hydrotreated heavy		10 - 20	64742-48-9
paraffin oils (petroleum), catalytic dewaxed heavy		10 - 20	64742-70-7
paraffin oils (petroleum), catalytic dewaxed light		5 - 10	64742-71-8
calcium dodecylbenzenesulphonate		3 - 5	26264-06-2
carbon dioxide		1 - 3	124-38-9
fatty acids, C18-unsatd., dimers		1 - 3	61788-89-4
petrolatum		1 - 3	8009-03-8
sodium petroleum sulfonate		1 - 3	68608-26-4
sorbitan monooleate		1 - 3	1338-43-8
sorbitan monotallate		1 - 3	61791-48-8

SECTION 4 First aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. 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. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms and health effects	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Diarrhea. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause redness and pain.
Personal protection for first-aid responders	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.
Notes to physician	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5 Fire-fighting measures

Extinguishing media	Alcohol resistant foam. Powder. 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	Contents under pressure. Pressurized container may rupture when exposed to heat or flame. During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Move containers from fire area if you can do so without risk. 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	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
General fire hazards	Extremely flammable aerosol. Will burn if involved in a fire.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.

SECTION 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. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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 release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. 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. Prevent product from entering drains. 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.

SECTION 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. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only in well-ventilated areas. 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.
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Storage Level 3 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. This material can accumulate static charge which may cause spark and become an ignition source. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 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
carbon dioxide (CAS 124-38-9)	PC-STEL	18000 mg/m ³
	PC-TWA	9000 mg/m ³

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

Monitoring methods Not available.

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. Provide eyewash station.

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: Nitrile. Neoprene.

Eye protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear suitable protective clothing.

SECTION 9 Physical and chemical properties

Appearance

Physical state Liquid.

Form Aerosol.

Color Tan. Cream.

Odor Petroleum.

pH Not available.

Melting point/freezing point -56.2 °F (-49 °C) estimated

Boiling point, initial boiling point, and boiling range 212 °F (100 °C) estimated

Flash point 144 °F (62.2 °C) Setaflash

Flammability limit - lower (%) 0.5 % estimated

Flammability limit - upper (%) 6 % estimated

Explosive limit - lower (%) 0.5 % estimated

Explosive limit - upper (%) 6 % estimated

Vapor pressure 1489.8 hPa estimated

Vapor density > 1 (air = 1)

Relative density 0.87 estimated

Density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature 410 °F (210 °C) estimated

Decomposition temperature Not available.

Evaporation rate	Slow.
Other data	
Percent volatile	59.6 % estimated

SECTION 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	Keep away from heat, hot surfaces, 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	Carbon oxides. Sulfur oxides. Hydrogen sulfide. Mercaptans. Sulfides. Hydrocarbon fumes and smoke. Aldehydes.

SECTION 11 Toxicological information

Acute toxicity	May be fatal if swallowed and enters airways. In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. May be harmful in contact with skin.
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Components	Species	Test Results
calcium dodecylbenzenesulphonate (CAS 26264-06-2)		
<u>Acute</u>		
Oral		
LD50	Rat	1300 mg/kg
carbon dioxide (CAS 124-38-9)		
<u>Acute</u>		
Inhalation		
Gas		
LC50	Rat	470000 ppm, 30 minutes
distillates (petroleum), hydrotreated light (CAS 64742-47-8)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 20 mg/l, 4 hours
Oral		
LD50	Rat	> 5000 mg/kg
fatty acids, C18-unsatd., dimers (CAS 61788-89-4)		
<u>Acute</u>		
Oral		
LD50	Rat	> 5000 mg/kg
naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
petrolatum (CAS 8009-03-8)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 20 mg/l, 4 hours
Oral		
LD50	Rat	> 2000 mg/kg
sodium petroleum sulfonate (CAS 68608-26-4)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 20 mg/l, 4 hours
Oral		
LD50	Rat	> 2000 mg/kg
sorbitan monooleate (CAS 1338-43-8)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 20 mg/l, 4 hours
Oral		
LD50	Rat	39800 mg/kg
sorbitan monotallate (CAS 61791-48-8)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 20 mg/l, 4 hours
Oral		
LD50	Rat	39800 mg/kg
Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.	
Symptoms	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Diarrhea. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause redness and pain.	
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitizer	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	Not classifiable as to carcinogenicity to humans.	

IARC Monographs. Overall Evaluation of Carcinogenicity

paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8) 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	May cause drowsiness and dizziness.
Specific target organ toxicity following repeated exposure	Not classified.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	Prolonged inhalation may be harmful.

SECTION 12 Ecological information**Ecotoxicological data**

Components	Species	Test Results
fatty acids, C18-unsatd., dimers (CAS 61788-89-4)		
Aquatic		
<i>Acute</i>		
Fish	LC50 Carp (Cyprinus carpio)	> 350 mg/l, 96 hours
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50 Daphnia	> 100 mg/l, 48 hours
sorbitan monooleate (CAS 1338-43-8)		
Aquatic		
<i>Acute</i>		
Fish	LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss)	> 1000 mg/l, 96 hours
Ecotoxicity	Toxic to aquatic life. Harmful to aquatic life with long lasting effects.	
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.	
Bioaccumulation		
Mobility in soil	No data available for this product.	
Other hazardous effects	The product contains volatile organic compounds which have a photochemical ozone creation potential.	

SECTION 13 Disposal considerations

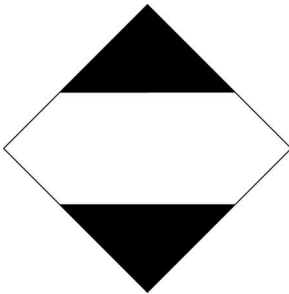
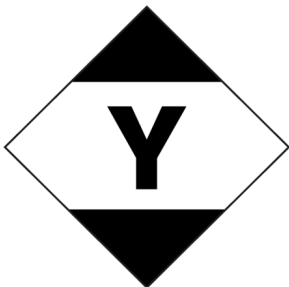
Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow 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.

SECTION 14 Transport information**CNDG**

UN number	UN1950
UN proper shipping name	AEROSOLS, Limited Quantity
Transport hazard class(es)	
Class	2.1
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, flammable, Limited Quantity

Transport hazard class(es)**Class** 2.1**Subsidiary risk** -**Packing group** Not available.**Environmental hazards** No.**ERG Code** 10L**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** 2.1**Subsidiary risk** -**Packing group** Not available.**Environmental hazards****Marine pollutant** No.**EmS** F-D, S-U**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.**the IBC Code****CNDG; IMDG****IATA****SECTION 15 Regulatory information****Law of the People's Republic of China on Prevention and Control of Occupational Diseases**

Not regulated.

Regulations on the Control over Safety of Dangerous Chemicals**Catalog of Hazardous Chemicals**

CARBON DIOXIDE, COMPRESSED OR LIQUEFIED (CAS 124-38-9)

KEROSENE (CAS 64742-47-8)

SOLVENT NAPHTHA [CLOSED CUP FLASH POINT <= 60 .DEGREE.C] (CAS 64742-48-9)

Interim Provisions on the Supervision and Management of Major Hazards of Dangerous Chemicals GB**18218-2008 Identification of major hazard installations for dangerous chemicals**

Chemical name	CAS number	Threshold quantity (Tons)	Type
benzene	71-43-2	50	Flammable liquids
toluene	108-88-3	500	Flammable liquids

Provision on the Environmental Administration of New Chemical Substances**China Inventory of Existing Chemical Substances**

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).

Other regulations

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

China. National Catalogue of Hazardous Wastes

naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)
petrolatum (CAS 8009-03-8)

International regulations**Stockholm Convention**

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

carbon dioxide (CAS 124-38-9) Listed.

Basel Convention

Not applicable.

SECTION 16 Other information**References**

EPA: AQUIRE database
GB6944-2012: Classification and Code of Dangerous Goods.
GB12268-2012: List of Dangerous Goods.
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents

Further information

CRC # 527J-K/1002538-1002540

Disclaimer

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Revision information

This document has undergone significant changes and should be reviewed in its entirety.