



CHEMICAL PRODUCT SAFETY DATA SHEET

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

1. Chemical product and company identification

| | |
|-------------------------------------|--|
| Product name | SP-350™ Corrosion Inhibitor (bulk) |
| Product code | 03266, 03268, PR03266, PR03268 |
| Company name | CRC Industries, Inc. |
| Address | 885 Louis Dr. Warminster, PA 18974 US |
| Telephone | |
| General Information | 1-215-674-4300 |
| Technical Assistance | 1-800-521-3168 |
| Customer Service | 1-800-272-4620 |
| 24-Hour Emergency (CHEMTREC) | +86 532 83889090 (China) 1-703-527-3887 (International) |
| Website | www.crcindustries.com |

Recommended use and Limitations on use

| | |
|------------------------|-----------------------------------|
| Recommended use | Lubricant and corrosion inhibitor |
| Issue date | 11-25-2014 |

2. Hazards identification

| | |
|---------------------------|---|
| Emergency overview | May be ignited by heat, sparks or flames. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness and dizziness. Dangerous for the environment if discharged into watercourses. |
|---------------------------|---|

GHS-classification

| | | |
|--|--|-----------------------------|
| Physical hazards | Flammable liquids | Category 4 |
| Health hazards | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2A |
| | 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 |
| Other hazards which do not result in classification | Not classified. | |

Label elements

Pictograms



GHS-labeling

Signal word

Danger

Hazard statement

Combustible liquid. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Toxic to aquatic life.

Precautionary statement

Prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Wear protective gloves/eye protection/face protection. Avoid release to the environment.

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| Response | In case of fire: Do not use water jet as an extinguisher, as this will spread the fire. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (see this label). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. |
| Storage | Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Physical and chemical hazards | Combustible liquid. |
| Health hazards | Causes skin irritation. Causes serious eye irritation. May be harmful if swallowed and enters airways. May cause drowsiness and dizziness. |
| Environmental hazards | Toxic to aquatic life. |

3. Composition/information on ingredients

| Substance/mixture | Mixture | CAS Number | Concentration (%) |
|---|---------|-------------|-------------------|
| Chemical name | | | |
| Distillates (petroleum), hydrotreated light | | 64742-47-8 | 50 - 60 |
| Distillates (petroleum), solvent-refined heavy paraffinic | | 64741-88-4 | 20 - 30 |
| Calcium sulfonate, salt | | Proprietary | 3 - 5 |
| Petrolatum | | 8009-03-8 | 1 - 3 |
| Sodium petroleum sulfonate | | 68608-26-4 | 1 - 3 |
| Solvent Naphtha (petroleum), Medium Aliph. | | 64742-88-7 | 1 - 3 |
| Calcium carbonate | | 471-34-1 | < 0.3 |
| n-Nonane | | 111-84-2 | < 0.3 |
| n-Octane | | 111-65-9 | < 0.2 |

4. First aid measures

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| 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. 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 | Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
| Expected acute symptoms and delayed symptoms | Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. 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. |
| Notes to physician | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. |

5. Fire-fighting measures

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| Extinguishing media | Alcohol resistant foam. Water fog. Dry chemical 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 | The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed. |
| Special fire fighting procedures | In case of fire and/or explosion do not breathe fumes. 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. |

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| Protection of fire-fighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| General fire hazards | Combustible liquid. |
| 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. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. 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. Wear appropriate protective equipment and clothing during clean-up. Use personal protection recommended in Section 8 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.

Clean-up methods and materials and containment measures Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. 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. 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. 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. Prevent entry into waterways, sewer, basements or confined areas.

Prevention of secondary hazards None known.

7. Handling and storage

Handling Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment.

Storage Keep away from heat and sources of ignition. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Exposure limits

China

| Components | Type | Value | Form |
|----------------------------------|------|-----------|------------------|
| Calcium carbonate (CAS 471-34-1) | TWA | 8 mg/m3 | Total dust. |
| | | 4 mg/m3 | Respirable dust. |
| n-Nonane (CAS 111-84-2) | TWA | 500 mg/m3 | |
| n-Octane (CAS 111-65-9) | TWA | 500 mg/m3 | |

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. Eye wash facilities and emergency shower must be available when handling this product.

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. Nitrile. |
| Eye protection | Wear safety glasses with side shields (or goggles). |
| Skin and body protection | Wear appropriate chemical resistant clothing. |

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|-------------------------|--|
| 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 | Liquid. |
| Color | Tan. Cream. |

Odor Petroleum.

pH Not available.

Melting point/freezing point Not available.

Boiling point, initial boiling point, and boiling range > 392 °F (> 200 °C)

Flash point 190 °F (87.8 °C) Tag Closed Cup

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 1 hPa estimated

Vapor density > 1 (air = 1)

Relative density 0.86

Density Not available.

Solubility(ies)

Solubility (water) Not available.

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

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Evaporation rate Slow

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 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 Carbon oxides. Sulfur compounds.

11. Toxicological information

Acute toxicity May be fatal if swallowed and enters airways. Narcotic effects.

| Product | Species | Test Results |
|------------------------------------|---------|---|
| SP-350™ Corrosion Inhibitor (bulk) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | 5812.3037 mg/kg |
| <i>Inhalation</i> | | |
| LC50 | Rat | 47863.2461 ppm, 4 hours 200.5901 mg/l, 4 Hours |
| <i>Oral</i> | | |
| LD50 | Rat | 10035.4209 mg/kg |
| Subchronic | | |
| <i>Oral</i> | | |
| LD50 | Rat | 1564.4039 g/kg, 14 days |
| Components | Species | Test Results |

| | | |
|---|---|-------------------|
| n-Nonane (CAS 111-84-2) | | |
| Acute | | |
| <i>Inhalation</i> | | |
| LC50 | Rat | 3200 ppm, 4 Hours |
| <i>Other</i> | | |
| LD50 | Mouse | 218 mg/kg |
| Routes of exposure | Inhalation. Ingestion. Skin contact. Eye contact. | |
| Symptoms | Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. | |
| Skin corrosion/irritation | Causes skin irritation. | |
| Serious eye damage/eye irritation | Causes serious eye irritation. | |
| Respiratory sensitization | Not available. | |
| 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 | Not available. | |
| 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 | | |

12. Ecological information

| Ecotoxicological data | | |
|--|------------------------|---|
| Components | Species | Test Results |
| Calcium carbonate (CAS 471-34-1) | | |
| Aquatic | | |
| <i>Acute</i> | | |
| Fish | LC50 | Western mosquitofish (<i>Gambusia affinis</i>) > 56000 mg/l, 96 hours |
| Distillates (petroleum), hydrotreated light (CAS 64742-47-8) | | |
| Aquatic | | |
| <i>Acute</i> | | |
| Fish | LC50 | Bluegill (<i>Lepomis macrochirus</i>) 2.2 mg/l, 96 hours |
| Ecotoxicity | Toxic to aquatic life. | |

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

Bioaccumulation No data available.

Bioaccumulative potential

Octanol/water partition coefficient log Kow

| | |
|----------|------|
| n-Nonane | 5.46 |
| n-Octane | 5.18 |

Mobility in soil No data available for this product.

Other hazardous effects None known.

13. Disposal considerations

Residual waste Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Recommended methods for final destination

Local disposal regulations Dispose of contents/container in accordance with local/regional/national regulations. 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.

14. Transport information

CNDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

15. Regulatory information

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | No |
| 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) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| 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).

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 Dangerous Chemical Products

n-Octane (CAS 111-65-9)

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

Calcium carbonate (CAS 471-34-1)

n-Nonane (CAS 111-84-2)

n-Octane (CAS 111-65-9)

National Catalogue of Hazardous Wastes

Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)

Petrolatum (CAS 8009-03-8)

Restricted Import/Export Toxic Chemical List (MEP and GCA Announcement No. 2008-66, Dec. 1, 2008, amended through MEP and Customs Notice No. 2011-91, December 28, 2011)

Not regulated.

Classification and code of dangerous goods (GB6944-2005)

Not regulated.

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

Not 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 # 540F-G

Disclaimer

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