SAFETY DATA SHEET



1. Identification

| Product identifier | Solder Seal/Gunk Heavy Duty Engine Block Seal | | |
|---------------------------------|--|-------------------------------|------------|
| Other means of identification | | | |
| SDS number | C655 | | |
| Part No. | C655 | | |
| Tariff code | 2839.19.0000 | | |
| Recommended use | Radiator Sealer | | |
| 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) 684-18 | |
| Website | www.rscbrands.com | (, | |
| E-mail | Not available. | | |
| Emergency phone number | Emergency Telephone: Emergency Contact: | (303) 623-571 RMPDC (877- | |
| 2. Hazard(s) identification | | | |
| Physical hazards | Not classified. | | |
| Health hazards | Acute toxicity, oral | | Category 4 |
| | Sensitization, respiratory | | Category 1 |
| Environmental hazards | Hazardous to the aquatic environ hazard | onment, acute | Category 1 |
| | Hazardous to the aquatic environ long-term hazard | onment, | Category 1 |
| | | | |

Not classified.

OSHA defined hazards

Label elements



| Signal word | Danger |
|--|---|
| Hazard statement | Harmful if swallowed. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. |
| Precautionary statement | |
| Prevention | Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. In case of inadequate ventilation wear respiratory protection. |
| Response | If swallowed: Call a poison center/doctor if you feel unwell. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Rinse mouth. If experiencing respiratory symptoms: Call a poison center/doctor. Collect spillage. |
| Storage | Store away from incompatible materials. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Hazard(s) not otherwise classified (HNOC) | None known. |

5.55% of the mixture consists of component(s) of unknown acute oral toxicity. 6.32% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 6.62% of the mixture consists of component(s) of unknown long-term hazards to the aguatic environment.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|-----------|
| Sodium Silicate | | 1344-09-8 | 30 - < 40 |
| Glutar Aldehyde | | 111-30-8 | < 1 |
| Other components below reportable levels | | | 60 - < 70 |

Other components below reportable levels

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

4. First-aid measures Inhalation If breathing is difficult, remove 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. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact Eye contact Rinse with water. Get medical attention if irritation develops and persists. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Ingestion Get medical advice/attention if you feel unwell. Difficulty in breathing. Most important symptoms/effects, acute and delayed Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim Indication of immediate medical attention and special under observation. Symptoms may be delayed. treatment needed General information 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. 5. Fire-fighting measures Suitable extinguishing media Powder. Foam. Carbon dioxide (CO2). Unsuitable extinguishing Do not use water jet as an extinguisher, as this will spread the fire. media During fire, gases hazardous to health may be formed. Specific hazards arising from the chemical Special protective equipment Self-contained breathing apparatus and full protective clothing must be worn in case of fire. and precautions for firefighters Move containers from fire area if you can do so without risk. **Fire fighting** equipment/instructions Specific methods Use standard firefighting procedures and consider the hazards of other involved materials. General fire hazards No unusual fire or explosion hazards noted. 6. Accidental release measures

| Personal precautions, protective equipment and emergency procedures | 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. |
|---|--|
| Methods and materials for containment and cleaning up | 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. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. 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. |
| | Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS |

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.

7. Handling and storage

Precautions for safe handling

Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store in a well-ventilated place. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

| US. ACGIH Threshold Limi | | | |
|-----------------------------------|--|---|--|
| Components | Туре | Value | |
| Glutar Aldehyde (CAS 111-30-8) | Ceiling | 0.05 ppm | |
| US. NIOSH: Pocket Guide | to Chemical Hazards | | |
| Components | Туре | Value | |
| Glutar Aldehyde (CAS 111-30-8) | Ceiling | 0.8 mg/m3 | |
| | | 0.2 ppm | |
| Biological limit values | No biological exposure limits noted for | or the ingredient(s). | |
| Appropriate engineering controls | 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. General ventilation normally adequate. | | |
| Individual protection measures | s, such as personal protective equipm | ent | |
| Eye/face protection | Face shield is recommended. Wear | safety glasses with side shields (or goggles). | |
| Skin protection | | | |
| Hand protection | Wear appropriate chemical resistant supplier. | gloves. Suitable gloves can be recommended by the glove | |
| Other | Wear suitable protective clothing. | | |
| Respiratory protection | Wear positive pressure self-containe | d breathing apparatus (SCBA). Dust & vapor respirator. | |
| Thermal hazards | Wear appropriate thermal protective | clothing, when necessary. | |
| General hygiene considerations | | ays observe good personal hygiene measures, such as ind before eating, drinking, and/or smoking. Routinely wash ent to remove contaminants. | |

9. Physical and chemical properties

| Appearance | Viscous. Liquid. |
|---|------------------|
| Physical state | Not available. |
| Form | Liquid. |
| Color | Reddish |
| Odor | Mild |
| Odor threshold | Not available. |
| рН | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | No Flash Point |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |

Upper/lower flammability or explosive limits

| Upper/lower flammability or expl | osive limits |
|--|-----------------------|
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 0.00001 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 | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Density | 10.34 lbs/gal |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 59.96 % estimated |
| Specific gravity | 1.24 |
| VOC (Weight %) | 0 % w/w |

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 | 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 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful. |
|--|---|
| Skin contact | No adverse effects due to skin contact are expected. |
| Eye contact | Direct contact with eyes may cause temporary irritation. |
| Ingestion | Harmful if swallowed. |
| Symptoms related to the physical, chemical and toxicological characteristics | Difficulty in breathing. |
| Information on toxicological effe | ects |
| Acute toxicity | Harmful if swallowed. |

| Components | Species | Test Results |
|--------------------------------|---------|--------------|
| Glutar Aldehyde (CAS 111-30-8) | | |
| <u>Acute</u> | | |
| Dermal | | |
| LD50 | Rabbit | 2560 mg/kg |
| Dermal | Rabbit | 2560 mg/kg |

| Components | Species | | Test Results |
|---|--|--|----------------------------|
| Inhalation | | | |
| LC50 | Rat | 2 | 24 mg/l, 4 Hours |
| Oral | | | |
| LD50 | Mouse | | 100 mg/kg |
| | Rat | 9 | 96.1 mg/kg |
| Sodium Silicate (CAS 1344-09-8) |) | | |
| <u>Acute</u> | | | |
| Oral | | | |
| LD50 | Mouse | | 1100 mg/kg |
| | Rat | | 1.1 g/kg |
| * Estimates for product may | be based on add | itional component data not shown. | |
| Skin corrosion/irritation | Prolonged ski | n contact may cause temporary irritation. | |
| Serious eye damage/eye rritation | Direct contact | with eyes may cause temporary irritation | |
| Respiratory or skin sensitizatio | on | | |
| ACGIH sensitization | | | |
| Glutar Aldehyde (CAS 1 | 11-30-8) | Sensitizer. | |
| Respiratory sensitization | May cause allergy or asthma symptoms or breathing difficulties if inhaled. | | |
| 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 i | s not considered to be a carcinogen by IA | RC, ACGIH, NTP, or OSHA. |
| OSHA Specifically Regulat Not listed. | ed Substances | (29 CFR 1910.1001-1050) | |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. | | |
| Specific target organ toxicity - single exposure | Not classified | | |
| Specific target organ toxicity - repeated exposure | Not classified | | |
| Aspiration hazard | Not likely, due to the form of the product. | | |
| Chronic effects | Prolonged inhalation may be harmful. | | |
| 12. Ecological informatio | n | | |
| Ecotoxicity | Very toxic to a | aquatic life with long lasting effects. | |
| Components | | Species | Test Results |
| Sodium Silicate (CAS 1344- | 09-8) | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Ceriodaphnia dubia) | 0.28 - 0.57 mg/l, 48 hours |
| Fish | LC50 | Western mosquitofish (Gambusia affinis | s) 1800 mg/l, 96 hours |
| * Estimates for product may | be based on add | itional component data not shown. | |
| Persistence and degradability | | ailable on the degradability of this product | t. |
| Bioaccumulative potential | | | |
| Mobility in soil | No data availa | able. | |
| | | area anvironmental offecto (o a ozono dor | |

13. Disposal considerations

Disposal instructions

Other adverse effects

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.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

| Local disposal regulations Hazardous waste code | Dispose in accordance with all applicable regulations. 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

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|---|----------|---|
| υ | υ | |

| DOT | |
|--|---|
| UN number | UN3082 |
| UN proper shipping name | Environmentally hazardous substances, liquid, n.o.s. (Dowicil A) |
| Transport hazard class(es) | |
| Class | 9 |
| Subsidiary risk | - |
| Label(s) | 9 |
| Packing group | III |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Special provisions | 8, 146, 335, IB3, T4, TP1, TP29 |
| Packaging exceptions | 155 |
| Packaging non bulk | 203 |
| Packaging bulk | 241 |
| ΙΑΤΑ | |
| UN number | UN3082 |
| UN proper shipping name | Environmentally hazardous substance, liquid, n.o.s. |
| Transport hazard class(es) | |
| Class | 9 |
| Subsidiary risk | - |
| Packing group | III |
| Environmental hazards | No. |
| ERG Code | 9L |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Other information | |
| Passenger and cargo | Allowed. |
| aircraft | |
| Cargo aircraft only | Allowed. |
| IMDG | |
| UN number | UN3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| Transport hazard class(es) | |
| Class | 9 |
| Subsidiary risk | - |
| Packing group | III |
| Environmental hazards | |
| Marine pollutant | No. |
| EmS | F-A, S-F |
| | Read safety instructions, SDS and emergency procedures before handling. |
| Transport in bulk according to | Not established. Not applicable. |
| Annex II of MARPOL 73/78 and the IBC Code | |
| | |



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. One or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Hazard categories

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No chemical

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated. (SDWA)

US state regulations

- US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100) Not listed.
- US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Glutar Aldehyde (CAS 111-30-8)

- US. Massachusetts RTK Substance List
- Glutar Aldehyde (CAS 111-30-8)
- US. New Jersey Worker and Community Right-to-Know Act
 - Glutar Aldehyde (CAS 111-30-8)
- US. Pennsylvania Worker and Community Right-to-Know Law
 - Glutar Aldehyde (CAS 111-30-8)
- US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Sodium 2-biphenylate (CAS 132-27-4) Listed: January 1, 1990

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) | No |
| 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 | No |

*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 | 04-20-2015 |
|---------------|---|
| Version # | 01 |
| HMIS® ratings | Health: 2* Flammability: 0 Physical hazard: 0 |
| NFPA ratings | Health: 2 Flammability: 0 Instability: 0 |
| NFPA ratings | 200 |

Disclaimer

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.