

SAFETY DATA SHEET

1. Identification

| Product identifier | Nickel Anti-Seize Compound | |
|--|--|--|
| Other means of identification SDS number | SDS-00035 | |
| Product code | GAJ-123, GAJ-4, GAJ-56, EXPB | |
| Recommended use | Anti-Seize for Liquid Tight Fittings | |
| Recommended restrictions | None known. | |
| Manufacturer/Importer/Supplier/Distributor information | | |
| Company name Thomas & Betts Corporation | | |
| Address 8155 T & B Boulevard | | |
| | Memphis, TN 38125 | |
| | USA | |
| Telephone | 901-252-5000 ext.8324 | |
| E-mail | Not available. | |
| Emergency phone number | For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night +1 703-741-5970 | |

2. Hazard(s) identification

| Physical hazards | Not classified. | | |
|--|---|-------------|--|
| Health hazards | | | |
| Health hazards | Sensitization, skin | Category 1 | |
| | Carcinogenicity | Category 1B | |
| | Specific target organ toxicity, repeated exposure | Category 1 | |
| OSHA defined hazards | Not classified. | | |
| Label elements | | | |
| Signal word | Danger | | |
| Hazard statement | May cause an allergic skin reaction. May cause cancer. Causes damage to organs through prolonged or repeated exposure. | | |
| Precautionary statement | | | |
| Prevention | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. | | |
| Response | If on skin: Wash with plenty of water. If exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. | | |
| Storage | Store locked up. | | |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. | | |
| Hazard(s) not otherwise classified (HNOC) | None known. | | |
| Supplemental information | None. | | |

3. Composition/information on ingredients

Mixtures

| Chemical name | CAS number | % |
|---|------------|---------|
| Distillates (petroleum), hydrotreated heavy naphthenic | 64742-52-5 | 30 - 60 |
| Nickel | 7440-02-0 | 10 - 30 |
| Graphite | 7782-42-5 | 5 - 10 |
| Aluminum | 7429-90-5 | 1 - 5 |
| Distillates (petroleum), hydrotreated heavy paraffinic | 64742-54-7 | 1 - 5 |

4. First-aid measures

| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. | | |
|--|---|--|--|
| Skin contact | Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. | | |
| Eye contact | Rinse with water. Get medical attention if irritation develops and persists. | | |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. | | |
| Most important symptoms/effects, acute and delayed | May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects. | | |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. | | |
| General information | 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. Wash contaminated clothing before reuse. | | |
| 5 Fire-fighting measures | | | |

5. Fire-fighting measures

| Suitable extinguishing media | Use fire-extinguishing media appropriate for surrounding materials. | | |
|--|---|--|--|
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. | | |
| Specific hazards arising from the chemical | 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 | 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 | 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. Do not breathe 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. | | |
|---|---|--|--|
| Methods and materials for containment and cleaning up | Scrape up spillage or absorb with absorbing material. Keep in suitable, closed containers for disposal. Following product recovery, flush area with water. 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 discharge into drains, water courses or onto the ground. | | |
| 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 breathe mist or vapor. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. | | |

8. Exposure controls/personal protection

Occupational exposure limits

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

| Components | Туре | Value | Form |
|--|--|-------------|---------------------------------------|
| Aluminum (CAS 7429-90-5) | PEL | 5 mg/m3 | Respirable dust. |
| | | 15 mg/m3 | Total dust. |
| Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) | PEL | 5 mg/m3 | Mist. |
| , | | 2000 mg/m3 | |
| | | 500 ppm | N 41-4 |
| Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | PEL | 5 mg/m3 | Mist. |
| Graphite (CAS 7782-42-5) | PEL | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| Nickel (CAS 7440-02-0) US. OSHA Table Z-3 (29 CF I | PEL R 1910.1000) | 1 mg/m3 | |
| Components | Туре | Value | |
| Graphite (CAS 7782-42-5) | TWA | 15 mppcf | |
| US. ACGIH Threshold Limit | | | |
| Components | Туре | Value | Form |
| Aluminum (CAS 7429-90-5) | TWA | 1 mg/m3 | Respirable fraction. |
| Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) | TWA | 5 mg/m3 | Inhalable fraction. |
| Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | TWA | 5 mg/m3 | Inhalable fraction. |
| Graphite (CAS 7782-42-5) | TWA | 2 mg/m3 | Respirable fraction. |
| Nickel (CAS 7440-02-0) | TWA | 1.5 mg/m3 | Inhalable fraction. |
| US. NIOSH: Pocket Guide to | o Chemical Hazards | | |
| Components | Туре | Value | Form |
| Aluminum (CAS 7429-90-5) | TWA | 5 mg/m3 | Respirable. |
| | | 5 mg/m3 | Welding fume or pyrophoric powder. |
| | | 10 mg/m3 | Total |
| Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) | Ceiling | 1800 mg/m3 | |
| · | STEL | 10 mg/m3 | Mist. |
| | TWA | 5 mg/m3 | Mist. |
| Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | STEL | 10 mg/m3 | Mist. |
| | TWA | 5 mg/m3 | Mist. |
| Graphite (CAS 7782-42-5) | TWA | 2.5 mg/m3 | Respirable. |
| Nickel (CAS 7440-02-0) | TWA | 0.015 mg/m3 | - |
| ogical limit values | No biological exposure limits noted for the ingredient(s). | | |
| - | Occupational Exposure Limits are not relevant to the current physical form of the product. | | |

| Appropriate engineering controls | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rate should be matched to conditions. If applicable, use process enclosures, local exhaust ventil or other engineering controls to maintain airborne levels below recommended exposure lim exposure limits have not been established, maintain airborne levels to an acceptable level. | |
|-------------------------------------|--|--|
| Individual protection measures | , such as personal protective equipment | |
| Eye/face protection | Chemical respirator with organic vapor cartridge and full facepiece. | |
| Skin protection | | |
| Hand protection | Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. | |
| Skin protection | | |
| Other | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. | |
| Respiratory protection | Chemical respirator with organic vapor cartridge and full facepiece. | |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. | |
| General hygiene considerations | Observe any medical surveillance requirements. 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. Contaminated work clothing should not be allowed out of the workplace. | |

9. Physical and chemical properties

| , | • |
|--|-----------------------------|
| Appearance | |
| Physical state | Liquid. |
| Form | Paste. |
| Color | Gray. |
| Odor | Petroleum. |
| Odor threshold | Not available. |
| рН | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | > 93 °C (> 199.4 °F) |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or expl | losive limits |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | < 5 mm hg (80 °F / 26.7 °C) |
| Vapor density | Not available. |
| Relative density | 1.1 |
| Solubility(ies) | |
| Solubility (water) | Negligible |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 2.47 %; 27 g/l |

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 | Carbon oxides. Oxides of aluminum. Nickel oxides. |

11. Toxicological information

Information on likely routes of exposure

| Inhalation | Vapors may cause headache, fatigue, dizziness and nausea. May cause respiratory tract irritation. | | |
|--|--|---|--|
| Skin contact | May cause an allergic skin reaction. May cause skin irritation. | | |
| Eye contact | May cause eye irritation. | | |
| Ingestion | Ingestion may cause gastroint | estinal irritation, nausea, vomiting and diarrhea. | |
| Symptoms related to the physical, chemical and toxicological characteristics | May cause an allergic skin reaction. Dermatitis. Rash. | | |
| Information on toxicological effe | cts | | |
| Acute toxicity | May cause an allergic skin rea | ction. | |
| Skin corrosion/irritation | Prolonged skin contact may ca | ause temporary irritation. | |
| Serious eye damage/eye irritation | Direct contact with eyes may c | ause temporary irritation. | |
| Respiratory or skin sensitization | | | |
| Respiratory sensitization | Not a respiratory sensitizer. | | |
| Skin sensitization | May cause an allergic skin rea | ction. | |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. | | |
| Carcinogenicity | May cause cancer. | | |
| IARC Monographs. Overall E | valuation of Carcinogenicity | | |
| Distillates (petroleum), hyd (CAS 64742-52-5) Nickel (CAS 7440-02-0) | drotreated heavy naphthenic | 3 Not classifiable as to carcinogenicity to humans.2B Possibly carcinogenic to humans. | |
| NTP Report on Carcinogens | | | |
| Distillates (petroleum), hyd (CAS 64742-54-7) Nickel (CAS 7440-02-0) | drotreated heavy paraffinic | Known To Be Human Carcinogen. Known To Be Human Carcinogen. | |
| | | Reasonably Anticipated to be a Human Carcinogen. | |
| | I Substances (29 CFR 1910.10 | 01-1050) | |
| Not regulated. | This product is not expected to | a course reproductive or developmental offecte | |
| 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 | Causes damage to organs through prolonged or repeated exposure. Respiratory system. | | |
| Aspiration hazard | Not an aspiration hazard. | | |
| Chronic effects | Causes damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects. | | |
| 12. Ecological information | | | |
| 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. | | |

| Components | | Species | Test Results | |
|-------------------------------|---|--|-----------------------------|--|
| Nickel (CAS 7440-02-0) | | | | |
| Aquatic | | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 1 mg/l, 48 hours | |
| | | | 1 mg/l, 48 Hours | |
| | LC50 | Calanoid copepod (Eurytemora affinis) | 7.35 - 12.12 mg/l, 96 hours | |
| Persistence and degradability | No data is ava | No data is available on the degradability of this product. | | |
| Bioaccumulative potential | No data availa | No data available. | | |
| Mobility in soil | The product is | The product is insoluble or slightly soluble in water. | | |
| 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. 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

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established. 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. All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Hazard categories

CERCLA Hazardous Substance List (40 CFR 302.4)

Nickel (CAS 7440-02-0)

LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No chemical

| Chemical name | | CAS number | % by wt. | |
|--|--|------------------------------|-------------------------|-----------------------|
| Nickel Aluminum | | 7440-02-0 7429-90-5 | 10 - 30 1 - 5 | |
| | | 7429-90-5 | 1-5 | |
| ner federal regulations | tion 440 Honordovo Air D | | | |
| | tion 112 Hazardous Air P | oliutants (HAPS) List | | |
| | tion 112(r) Accidental Rel | ease Prevention (40 CFR | 68.130) | |
| Not regulated. | | | | |
| Safe Drinking Water Act (SDWA) | Not regulated. | | | |
| state regulations | | | | |
| US. Massachusetts RTK | - Substance List | | | |
| |), hydrotreated heavy naph), hydrotreated heavy paraf 42-5) | | | |
| US. New Jersey Worker | and Community Right-to- | Know Act | | |
| Graphite (CAS 7782- Nickel (CAS 7440-02- |), hydrotreated heavy paraf 42-5) | | | |
| Aluminum (CAS 7429 | | | | |
| |), hydrotreated heavy paraf 42-5) | finic (CAS 64742-54-7) | | |
| Aluminum (CAS 7429 | 0-00-5) | | | |
| Nickel (CAS 7440-02 | | | | |
| US. California Propositio | | | | |
| | luct contains a chemical kn | own to the State of Californ | ia to cause cancer. | |
| US - California Prop Nickel (CAS 744 | osition 65 - Carcinogens | & Reproductive Toxicity (| (CRT): Listed substance | |
| ernational Inventories | | | | |
| Country(s) or region | Inventory name | | | On inventory (yes/no) |
| Australia | - | of Chemical Substances (A | ICS) | Yes |
| Canada | Domestic Substances | | | Yes |
| Canada | Non-Domestic Subst | . , | | No |
| China | | Chemical Substances in Cl | nina (IECSC) | Yes |
| Europe | | of Existing Commercial Che | , , | Yes |
| Europe | | fied Chemical Substances | (ELINCS) | No |
| Japan | · | and New Chemical Substa | | No |
| Korea | Existing Chemicals L | | · · · | Ye |
| | New Zealand Invento | | | |
| New Zealand | | or v | | Yes |
| New Zealand Philippines | | of Chemicals and Chemical | Substances | Ye |

*A "Yes" indicates this product complies 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 | 17-December-2015 |
|---------------|------------------|
| Revision date | 13-May-2016 |

Revision # HMIS® ratings

NFPA ratings

2 Health: 2* Flammability: 1 Physical hazard: 0



Disclaimer

Thomas & Betts Corporation cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.