

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 02/03/2004

Reviewed on 02/03/2004

1 Identification of substance

- **Product details**
- **Trade name:** Secondary Standard
- **Product Use:** Standard
- **Part of Orion:** AC201S
- **MSDS p/n:** 233273-001 Revision D
- **Manufacturer/Supplier:**
Thermo Electron Corporation
Environmental Instruments
Water Analysis Group
166 Cummings Center
Beverly, MA 01915-6110
USA
Phone: 978-232-6000
Made in Germany

2 Composition / Data on components

- **Chemical characterization:**
- **CAS No. Description**
Styrene Divinyl Benzene Copolymer Bead < 1 %
- **Additional information:** The Standard contains no hazardous ingredients according to OSHA definition.

3 Hazards identification

- **Hazard description:** Not applicable.
- **Information pertaining to particular dangers for man and environment:** Not applicable.
- **NFPA ratings (scale 0 - 4)**
Health = 0
Fire = 0
Reactivity = 0

4 First aid measures

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.

5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Dilute with plenty of water.

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- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in dry conditions.
- **Storage class:** Not required.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:** Preventive skin protection by use of skin-protecting agents is recommended.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling.
- **Body protection:** Protective work clothing

9 Physical and chemical properties

- | | |
|--|---|
| · Odor Threshold: | Not applicable. |
| · Form: | Fluid |
| · Color: | Cloudy |
| · Odor: | Odorless |
| · Melting point/Melting range: | 0°C (32°F) |
| · Boiling point/Boiling range: | 100°C (212°F) |
| · Freezing Point: | Not applicable. |
| · Flash point: | Not applicable. |
| · Flammability (solid, gaseous): | |
| Upper Flammable Limit: | Not applicable. |
| Lower Flammable Limit: | Not applicable. |
| · Ignition temperature: | Undetermined. |
| · Sensitivity to Mechanical Impact: | None |
| · Sensitivity to Static Discharge: | None |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Vapor Pressure at 20°C (68°F): | 23 hPa (17 mm Hg) |
| · Vapor Density: | Not applicable. |
| · Specific Gravity: | Not applicable. |

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- | | |
|---|---------------------|
| · Density at 20°C (68°F): | 1 g/cm ³ |
| · Solubility in / Miscibility with Water: | Fully miscible. |
| · Coefficient of Water / Oil Distribution: | Not applicable. |
| · pH-value at 20°C (68°F): | 6.7 |
| · Organic solvents: | 0.0 % |
| · Water: | < 100 % |
| · Solids content: | < 1 % |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
The substance is not subject to classification.
- **Carcinogenicity:** NTP? IARC Monographs? OSHA Regulated? Not found on these lists. see chapter 8 / 15
- **Teratogenicity:** Not found.
- **Mutagenicity:** Not found.
- **Reproductive Toxicity:** Not found.
- **Synergistic Products:** None

12 Ecological information

- **General notes:** Generally not hazardous for water

13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**
- **Hazard class:** None

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· Land transport ADR/RID (cross-border):

· ADR/RID class: None

· Maritime transport IMDG:

· IMDG Class: None

· Marine pollutant: No

· Air transport ICAO-TI and IATA-DGR:

· ICAO/IATA Class: None

· Proper shipping name: None

· TDG Class: None

· Transport/Additional information: Not dangerous according to the above specifications.

15 Regulations

· Sara

· Section 355 (Extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

7732-18-5 | water, distilled, conductivity or of similar purity

· Proposition 65

· Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity:

Substance is not listed.

· Canadian Ingredient Disclosure List

· Limit 0,1%

Substance is not listed.

· Limit 1%

Substance is not listed.

· Other Regulations

· EPA (Environmental Protection Agency)

Substance is not listed.

· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

· Product related hazard informations:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

· Water hazard class: Generally not hazardous for water.

· CPR Classification: None

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· **MSDS Discloses Information Elements Required by the CPR** ·

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Contact:** Thermo Electron Corporation, EID, Water Analysis, Quality Assurance

· * **Data compared to the previous version altered.**

USA