19 Chapin Road - Building C, Pine Brook, NJ 07058
800.783.9424 | avantik-us.com

Section 1. Identification of the Substance/Mixture and the Company

1.1 Product Identifier	Product Name: Avantik Nuclear Fast Red - 500mL Product Number: RS4429-500
1.2 Intended use	EN: Laboratory reagent. For professional use only. DA: Laboratoriereagens. Kun til professionelt brug. DE: Laboratoriumreagens. Alleen voor professioneel gebruik. EL: Αντιδραστήριο εργαστηρίου. Για επαγγελματική χρήση μόνο. ES: Reactivo de laboratorio. Sólo para uso profesional. FR: Réactif de laboratoire. Pour un usage professionnel uniquement. IT: Laboratorio di reagente. Solo per uso professionale. NL: Laboratoriumreagens. Alleen voor professioneel gebruik. PT: Reagente de laboratório. Para uso profissional. SV: Laboratoriereagens. Endast för yrkesmässig användning.
1.3 Details of the supplier of the safety data sheet	**Manufacturer**: Avantik **Address**: 19 Chapin Rd- Building C Pine Brook, NJ 07058 U.S.A. **Phone Number**: 800-783-9424 **e-mail**: info@avantik-us.com **Website**: avantik-us.com
1.4 Emergency Telephone	**Chemtrec (USA): 1-800-424-9300**

Section 2. Hazards Identification

2.1 GHS Classification	Skin irritation (Category 2) – H315 Eye irritation (Category 2) – H319
2.2 Label Elements	Pictogram(s): Signal word: Warning Hazard statement(s): H315 – Causes skin irritation H319 – Causes serious eye irritation Precautionary statement(s): P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P305 + P351 - IF IN EYES: Rinse cautiously with water for several minutes. P280 - Wear protective gloves, protective clothing, and eye/face protection.

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	Translations of Hazard and Precautionary statements can be found in section 15.
2.3 Other Hazards	None known.

Section 3. Composition and Information on Ingredients

3.2 Chemical Description: Mixture

*May contain additional non-hazardous proprietary ingredients.

*May contain additional active ingredients at concentrations <0.1%w/v.

Hazardous Ingredients:	CAS#	EC#	GHS Classification	%
Aluminum Sulfate Octadecahydrate	7784-31-8	233-135-0	Warning. 2 H315 Causes skin irritation. 3 H335 May cause respiratory irritation. Danger. 2 H318 Causes serious eye damage.	≤ 5

Section 4. First Aid Measures

4.1 Description of first aid measures – Also see GHS precautionary statements (section 2.2)

Eye Contact: Immediately flush eyes with copious amounts of water and get immediate medical attention.

Skin Contact: Wash contact area with mild soap and copious amounts of water.

Inhalation: Does not present an inhalation hazard. Always move person to fresh air and get medical attention if breathing is difficult.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

See section 2.2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5. Fire Fighting Measures

5.1 Extinguishing Media	Extinguish fire using water spray, carbon dioxide, chemical foam, or dry chemical.
5.2 Special hazards arising from the substance or mixture	Sulphur oxides, Aluminum oxide
5.3 Advice for firefighters	As with any fire, wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.)

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear chemical resistant clothing, gloves, and eye protection.

6.2 Environmental precautions

Keep material away from strong oxidizers, reducers, and reactive materials. Do not allow product to enter drain.

6.3 Methods and materials for containment and cleaning up

Wipe up or absorb spill using inert absorbent and place in a suitable waste container for disposal.

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Section 7. Handling and Storage

7.1 Precautions for safe handling.
Avoid contact with skin and eyes. Wash thoroughly after handling.
7.2 Conditions for safe storage, including any incompatibilities.
Store at 15-30°C. Keep container tightly closed.
7.3 Specific end use(s).
See section 1.2

Section 8. Exposure Controls / Personal Protection

8.1 Control parameters	**Exposure Limits:** Aluminum Sulfate Octadecahydrate - 7784-31-8 NIOSH TWA: 2mg/m^3
8.2 Exposure controls	**Personal Protective Equipment (PPE):** **Eye/Face protection.** Safety glasses or goggles are required. **Skin protection.** Protective clothing is required. **Hand protection.** Chemical resistant gloves are required. **Respiratory protection.** None required. **Environmental exposure controls.** Avoid releasing large quantities into the environment.
8.3 Engineering Controls	Fume hood/ventilation system is not required. In general, working area should be adequately large and well ventilated to prevent concentration of vapors.

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Red
Odor	Odorless
Odor Threshold	Unknown
pH	Moderately Acidic
Melting Point/ Freezing Point	Unknown
Initial Boiling Point	Unknown
Flash Point	Unknown
Evaporation Rate	Unknown
Flammability (solid, gas)	Unknown
Upper/Lower Flammability Limits	Unknown
Vapor Pressure	Unknown
Vapor Density	Unknown
Relative Density	Unknown
Solubility(ies)	Water
Partition Coefficient: n-octanol/water	Unknown

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Auto-Ignition Temperature	Unknown
Decomposition Temperature	Unknown
Viscosity	Unknown
Explosive Properties	Not explosive.
Oxidizing Properties	Not a significant oxidizer.

Section 10. Stability and Reactivity

10.1 Reactivity	Non-reactive.
10.2 Chemical Stability	At least stable for the stated shelf life under normal pressures and required storage temperatures.
10.3 Possibility of Hazardous Reactions	No hazardous reactions known.
10.4 Conditions to Avoid	Fire, static electricity, direct sunlight.
10.5 Incompatible Materials	Strong oxidzing or reducing agents, metals.
10.6 Hazardous Decomposition Materials	Upon intense fire - Sulfur oxides, Aluminum oxides.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	**Acute Toxicity.** Aluminum Sulfate Octadecahydrate - 7784-31-8 Oral – Rat LD_{50}: > 9,000mg/kg **Skin Corrosion/Irritation.** Aluminum Sulfate Octadecahydrate - 7784-31-8 Rabbit – no skin irritation **Serious Eye Damage/Irritation.** Aluminum Sulfate Octadecahydrate - 7784-31-8 Rabbit – severe eye irritation **Respiratory or skin sensitization.** No relevant data available. **Germ Cell Mutagenicity.** No relevant data available.
11.2 Carcinogenicity.	**International Agency for Research on Cancer (IARC).** None of the components are listed. **National Toxicology Program (NTP).** None of the components are listed.

Section 12. Ecological Information

12.1 Toxicity	No relevant studies identified.
12.2 Persistence and Degradability.	No relevant studies identified.
12.3 Bioaccumulative Potential.	No relevant studies identified.
12.4 Mobility in Soil.	Miscible in water. May spread in water systems. This component is non-volatile.
Additional Remarks	None.
12.5 Results of PBT and vPvB Assessment.	**PBT:** This mixture does not contain any substances that are assessed to be a PBT. **vPvB:** This mixture does not contain any substances that are assessed to be a vPvB.

Section 13. Disposal Considerations

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13.1 Waste Disposal Methods.	Sewage disposal is discouraged. Waste should not be disposed of by release to sewers. Dispose waste in accordance with federal, state and local environmental control regulations.
Product/Packaging Disposal.	Final decisions on the appropriate waste management method must be in line with local, regional and national regulations.
Other Disposal Recommendations.	No relevant data available.

Section 14. Transport Information – DOT, IATA, IMDG, ADR etc.

14.1 UN Number	Not Dangerous Goods
14.2 UN Proper Shipping Name	Not Dangerous Goods
14.3 Transport Hazard Class(es)	Not Dangerous Goods
14.4 Packing Group	Not Dangerous Goods
14.5 Environmental Hazards	**Marine Pollutant:** No
14.6 Special Precautions for User	Not applicable.
14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code.	This product is not intended to be transported in bulk as defined in Annex II of MARPOL73/78 and the IBC Code.

Section 15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture.	
Extremely Hazardous Substances; Section 355	None of the components in this mixture are listed.
Toxic Substances Control Act; TSCA	All of the components in this mixture are listed.
California Proposition 65	This mixture does not contain a chemical known to the state of California to cause cancer.
H statements	**H315 – Causes skin irritation** BG Предизвиква дразнене на кожата. ES Provoca irritación cutánea. CS Dráždí kůži. DA Forårsager hudirritation. DE Verursacht Hautreizungen. ET Põhjustab nahaärritust. EL Προκαλεί ερεθισμό του δέρματος. EN Causes skin irritation. FR Provoque une irritation cutanée. GA Ina chúis le greannú craicinn. IT Provoca irritazione cutanea. LV Kairina ādu. LT Dirgina odą. HU Bőrirritáló hatású. MT Jagħmel irritazzjoni tal-ġilda. NL Veroorzaakt huidirritatie. PL Działa drażniąco na skórę. PT Provoca irritação cutânea. RO Provoacă iritarea pielii. SK Dráždi kožu. SL Povzroča draženje kože.

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	FI Ärsyttää ihoa. SV Irriterar huden. **H319 Language 3.3 — Serious eye irritation, Hazard Category 2** BG Предизвиква сериозно дразнене на очите. ES Provoca irritación ocular grave. CS Způsobuje vážné podráždění očí. DA Forårsager alvorlig øjenirritation. DE Verursacht schwere Augenreizung. ET Põhjustab tugevat silmade ärritust. EL Προκαλεί σοβαρό οφθαλμικό ερεθισμό. EN Causes serious eye irritation. FR Provoque une sévère irritation des yeux. GA Ina chúis le greannú tromchúiseach don tsúil. IT Provoca grave irritazione oculare. LV Izraisa nopietnu acu kairinājumu. LT Sukelia smarkų akių dirginimą. HU Súlyos szemirritációt okoz. MT Jagħmel irritazzjoni serja lill-għajnejn. NL Veroorzaakt ernstige oogirritatie. PL Działa drażniąco na oczy. PT Provoca irritação ocular grave. RO Provoacă o iritare gravă a ochilor. SK Spôsobuje vážne podráždenie očí. SL Povzroča hudo draženje oči. FI Ärsyttää voimakkaasti silmiä. SV Orsakar allvarlig ögonirritation.
P statements	**P302+ P352 - IF ON SKIN: Wash with plenty of soap and water** BG ПРИ КОНТАКТ С КОЖАТА: Измийте обилно със сапун и вода. ES EN CASO DE CONTACTO CON LA PIEL: Lavar con agua y jabón abundantes. CS PŘI STYKU S KŮŽÍ: Omyjte velkým množstvím vody a mýdla. DA VED KONTAKT MED HUDEN: Vask med rigeligt sæbe og vand. DE BEI KONTAKT MIT DER HAUT: Mit viel Wasser und Seife waschen. ET NAHALE SATTUMISE KORRAL: pesta rohke vee ja seebiga. EL ΣΕ ΠΕΡΙΠΤΩΣΗ ΕΠΑΦΗΣ ΜΕ ΤΟ ΕΡΜΑ: Πλύνετε με άφθονο νερό και σαπούνι. EN IF ON SKIN: Wash with plenty of soap and water. FR EN CAS DE CONTACT AVEC LA PEAU: laver abondamment à l'eau et au savon. GA I gCÁS TEAGMHÁLA LEIS AN gCRAICEANN: Nigh le neart gallúnaí agus uisce. IT IN CASO DI CONTATTO CON LA PELLE: lavare abbondantemente con acqua e sapone. LV SASKARĒ AR ĀDU: nomazgāt ar lielu ziepju un ūdens daudzumu. LT PATEKUS ANT ODOS: Nuplauti dideliu kiekiu muilo ir vandens. HU HA BŐRRE KERÜL: Lemosás bő szappanos vízzel. MT JEKK FUQ IL-ĠILDA: Aħsel b'ħafna sapun u ilma. NL BIJ CONTACT MET DE HUID: met veel water en zeep wassen. PL W PRZYPADKU KONTAKTU ZE SKÓRĄ: Umyć dużą ilością wody z mydłem. PT SE ENTRAR EM CONTACTO COM A PELE: lavar com sabonete e água abundantes. RO ÎN CAZ DE CONTACT CU PIELEA: spălaţi cu multă apă şi săpun. SK PRI KONTAKTE S POKOŽKOU: Umyte veľkým množstvom vody a mydla. SL PRI STIKU S KOŽO: umiti z veliko mila in vode. FI JOS KEMIKAALIA JOUTUU IHOLLE: Pese runsaalla vedellä ja saippualla. SV VID HUDKONTAKT: Tvätta med mycket tvål och vatten. **P305 + P351 + P315 - IF IN EYES: Rinse cautiously with water for several minutes. Get immediate medical advice/attention.** **P280 - Wear protective gloves, protective clothing, and eye/face protection.**

Section 16. Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Avantik shall not be held liable for any damage resulting from handling or from contact with the above product.

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