





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

1.1 Product Identifier	Product Name: Schiff's Solution Product Number: SRF	
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	ScyTek Laboratories, Inc.
	Address	205 South 600 West Logan, Utah 84321 U.S.A.
	Phone Number	800-729-8350
	Fax Number	435-755-0015
	e-mail	msds@scytek.com
	Website	scytek.com

Section 2. Hazards Identification

2.1 GHS Classification	Skin irritation (Category 2) – H315 Serious eye damage (Category 1) – H318 Carcinogenicity (Category 1B) – H350	
Classification: Directive 1999/45/EC	 <p>C R22, R23, R31, R41, R45; S9, S26, S36/37/39, S45, S46</p> EN: Corrosive DA: Ætsende DE: Ätzend EL: Διαβρωτικό ES: Corrosivo FR: Corrosif IT: Corrosivo NL: Bijtend PT: Corrosivo SV: Frätande	







	 <p>Xn EN: Harmful DA: Sundhedsskadelig DE: Gesundheitsschädlich EL: Επιβλαβές ES: Nocivo FR: Nocif IT: Nocivo NL: Schadelijk PT: Nocivo SV: Hälsoskadlig</p> <p>For full text of R- & S- phrases: see Section 15.</p>								
2.2 Label Elements	<p>Pictogram(s):</p>  <p>Signal word: Danger</p> <p>Hazard statement(s): H318 – Causes serious eye damage H315 – Causes skin irritation H390 – May cause cancer H335 – May cause respiratory irritation.</p> <p>Precautionary statement(s): P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Get immediate medical advice/attention.</p>								
NFPA Scale: 0-4									
HMIS (U.S.A.) Scale: 0-4	<table border="1" style="width: 100%;"> <tr> <td style="background-color: #e6f2ff;">HEALTH</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: #ffcccc;">FLAMMABILITY</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: #ffffcc;">PHYSICAL HAZARD</td> <td style="text-align: center;">0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td style="text-align: center;">G</td> </tr> </table>	HEALTH	2	FLAMMABILITY	0	PHYSICAL HAZARD	0	PERSONAL PROTECTION	G
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2.3 Other Hazards	<p>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.</p>								

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 Symbols	%
Sodium Metabisulfite	7681-57-4	231-673-0	 Danger. 1 H318 Causes serious eye damage.  Warning. 4 H302 Harmful if swallowed.	≤ 2
Hydrochloric Acid	7647-01-0	231-595-7	 Warning. 3. H335 May cause respiratory irritation.  Danger. 1B. H314 Causes severe skin burns and eye damage.	≤ 1
Pararosaniline HCl (Basic Red 9)	569-61-9	209-321-2	 Warning. 2 H315 Causes skin irritation. 2 H319 Causes serious eye irritation. 3 H335 May cause respiratory irritation.  Danger. 1A H350 May cause cancer	≤ 0.5

Section 4. First Aid Measures

4.1 Description of first aid measures

Eye Contact: Check for and remove contact lenses. Immediately flush eyes with copious amounts of water and get immediate medical attention.

Skin Contact: Remove contaminated clothing and wash contact area with mild soap and copious amounts of water. Get medical attention if irritation develops.

Inhalation: If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms worsen.

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	No unusual fire or explosion hazards expected.
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. Wear NIOSH/MSHA approved breathing apparatus.

6.2 Environmental precautions

Keep material away from heat, flame, ignition sources, and reactive materials. Don't 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.

Section 7. Handling and Storage

7.1 Precautions for safe handling.

Avoid contact with skin and eyes.

Wash thoroughly after handling.

Avoid breathing vapor.

7.2 Conditions for safe storage, including any incompatibilities.

Store in well ventilated area.

Keep container tightly closed.

Store at 2-8°C.

7.3 Specific end use(s).

See section 1.2

Section 8. Exposure Controls / Personal Protection

<p>8.1 Control parameters</p>	<p>Exposure Limits: Sodium Metabisulfite: <i>NIOSH REL</i> : TWA 5 mg/m³ OSHA PEL ‡: none</p> <p>Hydrochloric Acid: <i>NIOSH REL</i> : C 5 ppm (7 mg/m³) OSHA PEL : C 5 ppm (7 mg/m³)</p>
<p>8.2 Exposure controls</p>	<p>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. Glove material must be resistant to the components of this product. Consult glove manufacturer for specific recommendations of appropriate material and thickness of glove. Respiratory protection. Avoid breathing vapor. Environmental exposure controls. Avoid releasing large quantities into the environment. No additional information.</p>
<p>Engineering Controls</p>	<p>Working area should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limits.</p>

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Transparent
Odor	Pungent Sulfur Dioxide
Odor Threshold	Unknown
pH	Unknown
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
Auto-Ignition Temperature	Unknown
Decomposition Temperature	Unknown
Viscosity	Unknown
Explosive Properties	Not explosive.
Oxidizing Properties	Unknown

Section 10. Stability and Reactivity

10.1 Reactivity	No relevant data available.
10.2 Chemical Stability	Stable under normal temperatures and pressures.
10.3 Possibility of Hazardous Reactions	No hazardous reactions known.
10.4 Conditions to Avoid	Fire, static electricity, direct sunlight.
10.5 Incompatible Materials	Bases, oxidizers, sodium nitrate.
10.6 Hazardous Decomposition Materials	Oxides of sulfur.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects.	<p>Acute Toxicity. No relevant data available</p> <p>Skin Corrosion/Irritation. Irritating to skin and mucous membranes.</p> <p>Serious Eye Damage/Irritation. Corrosive to eye.</p> <p>Respiratory or skin sensitization. No relevant data available.</p>
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	<p>Germ Cell Mutagenicity. No relevant data available.</p>
Carcinogenicity.	<p>International Agency for Research on Cancer (IARC). Hydrochloric Acid is listed as Group 3 – Not classifiable as to carcinogenicity in humans IARC: Pararosaniline (C.I. Basic red 9) is listed as a Group 2B: Possibly carcinogenic to humans. National Toxicology Program (NTP). Reasonably anticipated to be a human carcinogen.</p>


Section 12. Ecological Information

12.1 Toxicity	<p>Fish: No relevant studies identified. Crustacea: No relevant studies identified. Algae/Aquatic Plants: No relevant studies identified. Other Organisms: No relevant studies identified.</p>
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.	<p>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.</p>

Section 13. Disposal Considerations

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

14.1 UN Number DOT, IATA,IMDG, ADR	<p>DOT: 3265 ADR/RID: 3265 IMDG: 3265 IATA: 3265</p>
14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR	<p>ADR/RID: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Hydrochloric acid) IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Hydrochloric acid) IATA: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Hydrochloric acid) DOT: Corrosive liquid, acidic, organic, n.o.s. (Hydrochloric acid)</p>
14.3 Transport Hazard Class(es)	<p>DOT: 8 IATA: 8 IMDG: 8 ADR/RID:8</p> <div style="text-align: center;">  </div>

14.4 Packing Group DOT, IATA,IMDG, ADR	ADR/RID: III IMDG: III IATA: III DOT: III
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.	
Sara 313 Components	Hydrochloric Acid CAS# 7647-01-0
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	Pararosaniline: Warning! This product contains a chemical known to the State of California to cause cancer.
Right To Know Components	Pennsylvania, Massachusetts, New Jersey Right to Know: Sodium Metabisulphite CAS# 7681-57-4 Hydrochloric Acid CAS# 7647-01-0 Massachusetts, New Jersey Right to Know: Pararosaniline CAS# 569-61-9
15.2 Chemical Safety Assessment	No Chemical Safety Assessment has been carried out for this substance/mixture by ScyTek Laboratories, Inc.
R phrases	<p>R22 EN: Harmful if swallowed. DA: Farlig ved indtagelse. DE: Gesundheitsschädlich beim Verschlucken. EL: Επιβλαβές σε περίπτωση καταπόσεως. ES: Nocivo por ingestión. FR: Nocif en cas d'ingestion. IT: Nocivo per ingestione. NL: Schadelijk bij opname door de mond. PT: Nocivo por ingestão. SV: Farligt vid förtäring.</p> <p>R23 EN: Toxic by inhalation. DA: Giftig ved indånding. DE: Giftig beim Einatmen. EL: Τοξικό όταν εισπνέεται. ES: Tóxico por inhalación. FR: Toxique par inhalation. IT: Tossico per inalazione. NL: Vergiftig bij inademing. PT: Tóxico por inalação. SV: Giftigt vid inandning.</p> <p>R31 EN: Contact with acids liberates toxic gas. DA: Udvikler giftig gas ved kontakt med syre.</p>

	<p>DE: Entwickelt bei Berührung mit Säure giftige Gase. EL: Σε επαφή με οξέα ελευθερώνονται τοξικά αέρια. ES: Σε επαφή με οξέα ελευθερώνονται τοξικά αέρια. FR: Au contact d'un acide, dégage un gaz toxique. IT: A contatto con acidi libera gas tossico. NL: Vormt vergiftige gassen in contact met zuren. PT: Em contacto com ácidos liberta gases tóxicos. SV: Utvecklar giftig gas vid kontakt med syra.</p> <p>R41 EN: Risk of serious damage to eyes. DA: Risiko for alvorlig øjenskade. DE: Gefahr ernster Augenschäden. EL: Κίνδυνος σοβαρών οφθαλμικών βλαβών. ES: Riesgo de lesiones oculares graves. FR: Risque de lésions oculaires graves. IT: Rischio di gravi lesioni oculari. NL: Gevaar voor ernstig oogletsel. PT: Risco de lesões oculares graves. SV: Risk för allvarliga ögonskador.</p> <p>R45 EN: May cause cancer. DA: Kan fremkalde kræft. DE: Kann Krebs erzeugen. FR: Peut provoquer le cancer. IT: Può provocare il cancro. ES: Puede causar cáncer. FR: Risque de lésions oculaires graves. IT: Rischio di gravi lesioni oculari. NL: Gevaar voor ernstig oogletsel. PT: Risco de lesões oculares graves. SV: Risk för allvarliga ögonskador</p>
S phrases	<p>S9 EN: Keep container in a well-ventilated place. DA: Emballagen skal opbevares på et godt ventileret sted. DE: Behälter an einem gut gelüfteten Ort aufbewahren. EL: Το δοχείο να διατηρείται σε καλά αεριζόμενο μέρος. ES: Consérvese el recipiente en lugar bien ventilado. FR: Conserver le récipient dans un endroit bien ventilé. IT: Conservare il recipiente in luogo ben ventilato. NL: Op een goed geventileerde plaats bewaren. PT: Manter o recipiente num local bem ventilado. SV: Förpackningen förvaras på väl ventilerad plats.</p> <p>S26 EN: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. DA: Kommer stoffet i øjnene, skylles straks grundigt med vand og læge kontaktes. DE: Bei Berührung mit den Augen sofort gründlich mit Wasser abspülen und Arzt konsultieren. EL: Σε περίπτωση επαφής με τα μάτια πλύνετέ τα αμέσως με άφθονο νερό και ζητήστε ιατρική συμβουλή. ES: En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico. FR: En cas de contact avec les yeux, laver immédiatement et abondamment avec de l'eau et consulter un spécialiste. IT: In caso di contatto con gli occhi, lavare immediatamente e abbondantemente con acqua e consultare un medico. NL: Bij aanraking met de ogen onmiddellijk met overvloedig water afspoelen en deskundig medisch advies inwinnen. PT: Em caso de contacto com os olhos, lavar imediata e abundantemente com água e consultar um especialista. SV: id kontakt med ögonen, spola genast med mycket vatten och kontakta läkare.</p>

	<p>S36/37/39 EN: Wear suitable protective clothing, gloves and eye/face protection. DA: Brug særligt arbejdstøj, egnede beskyttelseshandsker og -briller/ansigtsskærm. DE: Bei der Arbeit geeignete Schutzkleidung, Schutzhandschuhe und Schutzbrille/Gesichtsschutz tragen. EL: Φοράτε κατάλληλη προστατευτική ενδυμασία, γάντια και συσκευή προστασίας ματιών/προσώπου ES: Úsense indumentaria y guantes adecuados y protección para los ojos/la cara. FR: Porter un vêtement de protection appropriée, des gants et un appareil de protection des yeux/du visage. IT: Usare indumenti protettivi e guanti adatti e proteggersi gli occhi/la faccia. NL: Draag geschikte beschermende kleding, handschoenen en een beschermingsmiddel voor de ogen/het gezicht. PT: Usar vestuário de protecção, luvas e equipamento protector para os olhos /face adequados. SV: Använd lämpliga skyddskläder, skyddshandskar samt skyddsglasögon eller ansiktsskydd.</p> <p>S45 EN: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). DA: Ved ulykkestilfælde eller ved ildebefindende er omgående lægebehandling nødvendig; vis etiketten, hvis det er muligt. DE: Bei Unfall oder Unwohlsein sofort Arzt zuziehen (wenn möglich, dieses Etikett vorzeigen). EL: Σε περίπτωση ατυχήματος ή αν αισθανθείτε αδιαθεσία ζητήστε αμέσως ιατρική συμβουλή (δείξτε την ετικέτα αν είναι δυνατό). ES: En caso de accidente o malestar, acúdase inmediatamente al médico (si es posible, muéstresela la etiqueta). FR: En cas d'accident ou de malaise, consulter immédiatement un medecin (si possible lui montrer l'etiquette). IT: In caso di incidente o di malessere consultare immediatamente il medico (se possibile, mostrargli l'etichetta). NL: Bij een ongeval of indien men zich onwel voelt, onmiddellijk een arts raadplegen (indien mogelijk hem dit etiket tonen). PT: Em caso de acidente ou de indisposição, consultar imediatamente o médico (se possível mostrar-lhe o rótulo). SV: Vid olycksfall, illamående eller annan påverkan, kontakta omedelbart läkare. Visa om möjligt etiketten.</p> <p>S46 EN: If swallowed, seek medical advice immediately and show this container or label. DA: Ved indtagelse, kontakt odūmgående læge og vis denne beholder eller etiket. DE: Bei Verschlucken sofort ärztlichen Rat einholen und Verpackung oder Etikett vorzeigen. EL: Σε περίπτωση κατάποσης ζητήστε αμέσως ιατρική συμβουλή και δείξτε αυτό το δοχείο ή την ετικέτα. ES: En caso de ingestión, acúdase inmediatamente al medico y muéstresela la etiqueta o el envase. FR: En cas d'ingestion, consulter immédiatement un médecin et lui montrer l'emballage ou l'étiquette. IT: In caso d'ingestione consultare immediatamente il medico e mostrargli il contenitore o l'etichetta. NL: In geval van inslikken onmiddellijk een arts raadplegen en verpakking of etiket tonen. PT: Em caso de ingestão, consultar imediatamente o médico e mostrar-lhe a embalagem ou o rótulo. SV: Vid förtäring kontakta genast läkare och visa denna förpackning eller etiketten.</p>
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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. ScyTek Laboratories shall not be held liable for any damage resulting from handling or from contact with the above product.