SECTION 1 - CHEMICAL IDENTIFICATION

PRODUCT NAME:	Trypan Blue (Direct blue 14)
RPI CATALOG #:	T89100
SUPPLIER'S NAME:	Research Products International Corp.
SUPPLIERS ADDRESS:	410 N Business Center Drive Mount Prospect, Il 60056
EMERGENCY CONTACT:	1-800-424-9300
OTHER INFORMATION:	847-635-7330

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H350	Carcinogenicity	Category 1B

2.2 GHS Label elements, including Hazard and Precautionary Statement(s)

Pictogram



Signal word: Danger

Hazard statement(s)

H350	May cause cancer

Prevention, Response, Storage and Disposal Precautionary Statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P281	Use personal protective equipment as required
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number:	72-57-1
EINECS Number:	200-786-7
Formula:	$C_{34}H_{24}N_6O_{14}S_4Na_4$
Molecular Weight:	960.82 g/mol

SECTION 4 - FIRST-AID MEASURES

4.1 Description of first aid measures

General advice: Consult a doctor and show this safety data sheet.

i. **If inhaled:** Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

ii. **In case of skin contact:** Immediately wash skin with copious amounts of soap and water for at least 15

minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

iii. **In case of eye contact:** Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

iv. **If swallowed:** Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed: Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

5.2 Special hazards arising from the substance or mixture: no data available.

5.3 Precautions for fire-fighters: Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

5.4 Further information: no data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions: Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections: For required PPE see section 8. For disposal see section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling: Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.

7.2 Conditions for safe storage, including any incompatibilities: Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Keep in a dry place. Store at room temperature.

7.3 Specific end use(s): Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Components with workplace control parameters: Contains no substances with occupational exposure limit values.

8.2 Exposure Controls

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Personal protective equipment

i. **Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

ii. **Skin protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

iii. **Body Protection:** Wear appropriate protective clothing. Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

iv. **Respiratory Protection:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

v. **Control of environmental exposure:** Do not let product enter drains

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Black Powder	**Vapor Pressure**	No Data Available
Odor	No Data Available	**Vapor Density**	No Data Available
Odor Threshold	No Data Available	**Relative Density**	No Data Available
pH	No Data Available	**Water Solubility**	No Data Available
Melting / Freezing Point	>300 ° C	**Partition Coefficient**	No Data Available
Initial Boiling Point Range	No Data Available	**Auto-Ignition Temperature**	No Data Available
Flash Point	No Data Available	**Decomposition Temperature**	No Data Available
Evaporation Rate	No Data Available	**Viscosity**	No Data Available
Flammability (Solid, Gas)	No Data Available	**Explosive Properties**	No Data Available
Upper / Lower Flammability Or Explosive Limits	No Data Available	**Oxidizing Properties**	No Data Available

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable under recommended transport or storage conditions.
Conditions to Avoid: Heat, moisture air or water, incompatibles
Incompatible Materials: acids, Acid chlorides, Acid anhydrides, oxidizing agents
Hazardous decomposition products: Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Sodium oxides other decomposition products - No data available In the event of fire: see section 5

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity

LD50 Oral	LD50 Oral	LD50 Dermal	LD50 Inhalation
6200 mg/kg (Rat)	Not Listed	Not Listed	Not Listed

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Toxicity to fish: LC50 - Oryzias latipes - > 1,000 mg/l - 48 h
Persistence and degradability/ Bioaccumlative potential/ Mobility in soil: No data available
Results of PBT and vPvB assessment: No data available
Other adverse effects: No data available
Chronic Toxicity: There are no known carcinogenic chemicals in this product

SECTION 13 - DISPOSAL CONSIDERATIONS

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 - TRANSPORT INFORMATION

	UN#	Proper Shipping Name	Hazard Class	Packaging Group	Reportable Quantity (RQ)
DOT	3077	Environmentally hazardous substance, solid, N.O.S. (Sodium Metabisulfite)	9	III	10 lbs
TDG		Not dangerous goods			
IATA		Not dangerous goods			
IMDG/IMO		Not dangerous goods			

SECTION 15 - REGULATORY INFORMATION

INTERNATIONAL INVENTORIES

TSCA	DSL	NDSL	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Listed	Listed	-	-	-	Listed	-	Listed	Listed	Listed

USA FEDERAL REGULATION
SARA 311/312 HAZARDOUS CATEGORIZATION

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release Of Pressure Hazard	Reactive Hazard
No	Yes	No	No	No

SARA 313

Component	CAS#	Weight %	SARA 313 - Threshold Values %
Trypan Blue	72-57-1	>60	0.1

Clean Water Act/ Clean Air Act: Not Applicable
OSHA/ TSCA 12(b): Not Applicable

California Proposition 65: California Proposition 65: This product contains the following Proposition 65 chemicals.

Component	CAS#	California Prop. 65	Category
Trypan Blue	72-57-1	Carcinogen	Carcinogen

CERCLA: This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	CAS#	Hazardous Substances RQs	CERCLA EHS RQs
Trypan Blue	72-57-1	10 lb	-

HMIS Rating

Health hazard	Chronic Health Hazard	Flammability	Physical Hazard
0	*	0	0

NFPA Rating

Health Hazard	Fire Hazard	Reactivity Hazard
0	0	0

STATE RIGHT TO KNOW

Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Listed	Listed	Listed	-	-

US DEPARTMENT OF TRANSPORTATION

REPORTABLE QUANTITY (RQ)	DOT MARINE POLLUTANT	DOT SEVER MARINE POLLUTANT
No	No	No

U.S. DEPARTMENT OF HOMELAND SECURITY: This product does not contain any DHS chemicals.

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

This SDS complies with the requirements of Regulation (EC).

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. Research Products International Corp. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. This product is sold for laboratory research and development purposes use only.