Werfen Group | Instrumentation Laboratory
113 Hartwell Ave., Lexington, MA 02421

MATERIAL SAFETY DATA SHEET

Emergency number: Chemtrec @ 1-800-424-9300

1. IDENTIFICATION OF PRODUCT

This Material Safety Data Sheet applies to:

Product Name	**Part No.**
HemosIL APTT-SP	**0020006300**

- **APTT Reagent**
- **Calcium Chloride**

2. COMPOSITION

INGREDIENT NAME	CONCENTRATION PERCENT BY WEIGHT
APTT Reagent	
Sodium Omadine 40% (preservative) CAS No. 3811-73-2 EINECS No. 223-296-5 Hazard Classification: Xn (as raw material) Risk Code: R22/36/37/38 R22: Harmful if swallowed R36/37/38: Irritating to eyes, respiratory system and skin	0.012
Sodium Hydroxide CAS No. 1310-73-2 EINECS No. 215-185-5 Hazard Classification: C (as raw material) Risk Code: R35 R35: Causes Severe Burns	0.04
Calcium Chloride	
Calcium Chloride Dihydrate CAS No.: 10035-04-8 EINECS No.: 233-140-8 Hazard Classification: Xi (as raw material) Risk Code: R36 R36: Irritating to eyes	0.35
Sodium Azide - (Preservative) CAS No.: 26628-22-8 EINECS No.: 247-852-1 Hazard Classification: T+ (as raw material) Risk Code: R28-32 R28: very toxic if swallowed R32: Contact with acid liberates very toxic gas	< 0.1

3. HAZARD IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYES
Direct eye contact may cause redness and irritation.

SKIN
Prolonged or repeated contact may cause skin irritation. Avoid prolonged or repeated contact with the skin.

INGESTION
Harmful if swallowed

INHALATION
Mild irritant.

4. FIRST AID MEASURES

EYES
In case of eye contact, flush eyes with plenty of water for at least 15 minutes. Ensure adequate flushing by separating the eyelids with fingers. Obtain medical attention if irritation develops.

SKIN
Promptly wash exposed areas thoroughly with soap and water. Obtain medical attention if irritation develops.

INGESTION
Rinse mouth with plenty of water. Obtain medical attention or contact the local Poison Control Center.

INHALATION
Remove individual to fresh air. Obtain medical attention if breathing becomes difficult.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT
LOWER EXPLOSIVE LIMIT (%): Not Applicable
UPPER EXPLOSIVE LIMIT (%): Not Applicable

FIRE AND EXPLOSION HAZARDS: Not Applicable.

EXTINGUISHING MEDIA
Use any extinguishing agent that is suitable for the surrounding fire.

FIRE FIGHTING INSTRUCTIONS
Wear self-contained breathing apparatus and protective clothing that is appropriate for fighting a typical fire involving chemical materials.

6. ACCIDENTAL RELEASE MEASURES

Wear appropriate personal protective equipment as specified in Section 8.

Clean up spills in a manner that does not disperse dust into the air or create aerosols of prepared solutions. Dry spills should be moistened with water or an EPA approved disinfectant. Contain spill and decontaminate the area. Pick up material and dispose in biohazard/sharps container as appropriate.

Do not empty into drains.

7. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS
Reference the product labeling for handling and storage instructions.

SPECIAL REQUIREMENTS: Keep away from acids (sodium azide reacts strongly) and away from contamination with heavy metals. Sodium azide has been reported to form lead or copper azide in laboratory plumbing, which may explode on percussion. Do not empty into drains.

WORK/HYGIENIC PRACTICES
Wash hands with soap and water after use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THRESHOLD LIMIT VALUES REGARDING THE RAW MATERIALS:

ACGIH TLV-CEILING: Sodium Azide 0.11 ppm (o.3 mg/m^3)
US OSHA PEL FINAL-CL: Sodium Azide 0.3 mg (NaN_3) m^3 (skin)
TVL-Ceiling: sodium hydroxide 2 mg/ m^3.

ENGINEERING CONTROLS
None normally required.

EYE/FACE PROTECTION
Safety glasses or splash goggles are recommended.

SKIN PROTECTION
Wear protective (latex/non-latex) gloves and laboratory coat as required to prevent skin contact.

RESPIRATORY PROTECTION
None normally required with adequate ventilation.

OTHER/GENERAL PROTECTION
Follow Good Laboratory Practices

9. PHYSICAL AND CHEMICAL PROPERTIES

	APTT Reagent	**Calcium Chloride**
Appearance:	liquid	liquid
Color:	slightly cloudy	colorless
Odor:	odorless	odorless
Density:	1.007 at 25°C	1.000 at 25°C
pH:	7.4 – 7.7 at 25°C	7.2 at 25°C
Vapor Pressure:	not determined	not determined
Specific Gravity:	not determined	not determined
Solubility (H20):	miscible	complete
Evaporation Rate:	not determined	not determined
Viscosity:	not determined	not determined
Boiling Point (C°):	not determined	not determined
Melting Point (C°):	not applicable	not applicable

10. STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBLE MATERIALS: Strong Acids (see Section 7)

HAZARDOUS DECOMPOSITION PRODUCTS
Harmful fumes of oxides, carbon, nitrogen, Br^-, Na_2O and SOx may be formed during thermal decomposition.

HAZARDOUS POLYMERIZATION: Will not occur

11. TOXICOLOGICAL INFORMATION

MISCELLANEOUS TOXICOLOGICAL INFORMATION

-Calcium Chloride: ipr-mus LD50: 20500 mg /kg; orl-rat LD50: 1000 mg/kg (anhydrous form); mutagenic and tumorogenic data (anhydrous form) (NIOSH).

-Sodium Omadine: orl-mus LD50: 870 mg/kg: no toxic effect noted, OYYAA2 4,883,70. (Oyo Yakuri).
ipr-mus LD50: 370 mg/kg: no toxic effect noted; OYYAA2 4,883,70. (Oyo Yakuri).
scu-mus LD50: 428 mg/kg: no toxic effect noted, OYYAA2 4,883,70 (Oyo Yakuri)
ivn-mus LD50: 320 mg/kg: no toxic effect noted; CSLNX NX#04703. (US Army Data NIOSH EXCH Chem)

-Sodium Azide: orl-rat LD50: 27 mg/kg; skn-rbt LD50: 20mg/kg; TLV CEILING 0.11 ppm (0.3 mg/m^3).
OSHA PEL Final-CL: 0.1 ppm (HN3) (skin); OSHA PEL Final-CL: 0.3 mg ($NaN3/m^3$ (skin).
Experimental mutagenic and tumorogenic data (NIOSH).

The health effects noted above are based on the extrapolation of data on the pure product ingredients. To the best of our knowledge, no health effects have been identified for the product mixture under normal conditions of use, although the health effects of the product have not been thoroughly investigated.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None known

12. ECOLOGICAL INFORMATION

OTHER ENVIRONMENTAL INFORMATION

No ecotoxicological data are available on the product.

Calcium Chloride dry: effect toxic to fish (5100 mg/L) and crustacean (990 mg/L).

Sodium Omadine: effect toxic to fish LC 50: 0.0073-8.6 mg/L (96 hours).

Sodium Azide: effect toxic to fish (0.98-8 mg/L) and plankton (5-14 mg/L).

Use in accordance with good laboratory practice. Do not waste in the environment.

13. DISPOSAL CONSIDERATIONS

The product waste is classified as toxic and harmful (azides). Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information. It is up to the user to classify the waste correctly prior to disposal.

14. TRANSPORT INFORMATION

No special precaution is required.

15. REGULATORY INFORMATION

This product is classified and labeled in accordance with Directive 1999/45/EC and following modifications. The health hazard classification has been determined based on composition and hazard data of each ingredient. Physical and health hazard information on the reagent mixture has not been determined. Any physical and health hazard information noted is based on a) evaluation of data of the pure ingredient and b) concentration of each ingredient.

Kit Hazard Classification
EEC Symbol: Not applicable
Risk Code: Not applicable
Safety Code: S24/25-29-36
- S24/25: avoid contact with skin and eyes
- S29: do not empty into drains
- S36: wear suitable protective clothing

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16. OTHER INFORMATION

REFERENCE DOCUMENTATION

Primary references used in the preparation of this document:

1. Product Specification.
2. Product Insert.

NOTE

The information supplied in this Material Safety Data Sheet represents the data and best information available at the date of preparation. It is provided with the aim of allowing proper and safe use, storage, transport and disposal of the product. It is not to be considered as a warranty or specification of product quality. It is related to the materials specifically indicated and does not apply if these are used in combination with other materials or during processes not specifically indicated in the text of this Material Safety Data Sheet.