

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

Product identifier

Product Name • **ThermaCool® TC100U**

Relevant identified uses of the substance or mixture and uses advised against

Recommended use • Consult manufacturer for recommended product use.

Details of the supplier of the safety data sheet

Manufacturer • Saint-Gobain
 14 McCaffrey Street
 Hoosick Falls, NY 12090
 United States
 www.tapesolutions.saint-gobain.com

Telephone (General) • (518) 686-7301 – US

Emergency telephone number

Manufacturer 800-424-9300 – CHEMTREC

Section 2: Hazards Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Skin Sensitization 1
 Reproductive Toxicity 1B

Label elements

OSHA HCS 2012

DANGER



Hazard statements

- May cause an allergic skin reaction.
 May damage fertility or the unborn child.

Precautionary statements

Prevention

- Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Avoid breathing dust.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves/protective clothing/eye protection/face protection.

Response

- If on skin: Wash with plenty of water.
 Wash contaminated clothing before reuse.
 Specific treatment, see supplemental first aid information.
 If skin irritation or rash occurs: Get medical advice/attention.

- IF exposed or concerned: Get medical advice/attention.
- Storage/Disposal**
- Store locked up.
 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- Other hazards**
- OSHA HCS 2012**
- When heated to temperatures above 150 °C (300 °F) in the presence of air, product can form formaldehyde vapors. Safe handling conditions may be maintained by keeping vapor concentrations within the occupational exposure limit for formaldehyde. Formaldehyde may cause cancer. It is also toxic by inhalation, skin absorption and ingestion, corrosive to skin and eyes, and may cause skin sensitization and respiratory irritation. See OSHA formaldehyde standard, 29 CFR 1910.1048 Hazardous decomposition products will be formed at elevated temperatures. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a mixture.

Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Titanate(3-), tris[P,P-dioctyl diphosphato (2-)-O'',O''''](2-propanolato)-, trihydrogen, branched and linear	CAS: 68585-78-4 EINECS: 271-587-0	0% TO 1%	NDA	OSHA HCS 2012: Skin Irrit. 2; Eye Irrit. 2	NDA
Magnesium oxide	CAS: 1309-48-4 EC Number: 215-171-9	0% TO 1%	NDA	OSHA HCS 2012: Hazard Not Otherwise Classified - Health Hazard - Metal Fume Fever	NDA
Proprietary	Proprietary	0% TO 1%	NDA	OSHA HCS 2012: Hazard Not Otherwise Classified - Health Hazard - Polymer fume fever	NDA
Cyclopentasiloxane, decamethyl-	CAS: 541-02-6 EINECS: 208-764-9	0.05% TO 0.75%	NDA	OSHA HCS 2012: Flam. Liq. 4; Eye Irrit. 2	NDA
Peroxide, bis(2,4-dichlorobenzoyl)-	CAS: 133-14-2 EINECS: 205-094-9	0.1% TO 0.5%	NDA	OSHA HCS 2012: Org. Perox. D; Skin Sens. 1; Repr. 1B	NDA
Octamethylcyclotetrasiloxane	CAS: 556-67-2 EC Number: 209-136-7 EU Index: 014-018-00-1	0.1% TO 0.3518%	Ingestion/Oral-Rat LD50 • 1540 mg/kg Inhalation-Rat LC50 • 36 g/m ³ 4 Hour(s) Skin-Rabbit LD50 • 794 µL/kg	OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (Orl); Acute Tox. 3 (Skn); Eye Irrit. 2; Repr. 2 (Inhl)	NDA
Phosphonic acid, bis(2-ethylhexyl) ester	CAS: 3658-48-8 EINECS: 222-904-6	0% TO 0.2%	NDA	OSHA HCS 2012: Eye Irrit. 2; Skin Irrit.2; STOT SE 3: Resp. Irrit.	NDA
2-Ethylhexanol	CAS: 104-76-7	0% TO	Skin-Rabbit	OSHA HCS 2012: Exposure	NDA

	EC Number: 203-234-3	0.05%	<u>LD50 • 1970 mg/kg</u> Ingestion/Oral-Rat LD50 • 3730 mg/kg	limit	
Boric acid	CAS: 10043-35-3 EC Number: 233-139-2 EU Index: 005-007-00-2	0% TO 0.023%	Ingestion/Oral-Rat LD50 • 2500 mg/kg	OSHA HCS 2012: Exposure limit	NDA
Isopropyl alcohol	CAS: 67-63-0 EC Number: 200-661-7 EU Index: 603-117-00-0	0% TO 0.02%	<u>Ingestion/Oral-Rat LD50 • 5000 mg/kg</u> Skin-Rabbit LD50 • 12800 mg/kg <u>Inhalation-Rat LC50 • 16000 ppm</u> 8 Hour(s)	OSHA HCS 2012: Exposure limit	NDA

The following substances are inextricably bound in the product and therefore does not contribute to a dust inhalation hazard: aluminum oxide, zinc oxide and magnesium oxide.

Section 4: First-Aid Measures

Description of first aid measures

- Inhalation** • Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. If irritation develops and persists, seek medical attention.
- Skin** • In case of contact with substance, immediately flush skin with running water for at least 20 minutes. If irritation develops and persists, get medical attention.
- Eye** • In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation develops and persists: Get medical advice/attention.
- Ingestion** • Rinse mouth. Do not give anything by mouth to an unconscious person. If signs/symptoms develop, get medical attention.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

- Notes to Physician** • All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Firefighting Measures

Extinguishing media

- Suitable Extinguishing Media** • In case of fire use media as appropriate for surrounding fire.
- Unsuitable Extinguishing Media** • No data available

Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards** • None known.
- Hazardous Combustion Products** • Formaldehyde, silicon oxides, carbon oxides.

Advice for firefighters

- Fire fighters should wear full-face, self-contained breathing apparatus and impervious protective clothing.
Fire fighters should avoid inhaling any combustion products.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions • Ventilate enclosed areas. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Emergency Procedures • Stay upwind. As an immediate precautionary measure, isolate spill or leak area for at least 25 meters (75 feet) in all directions. Keep unauthorized personnel away.

Environmental precautions

- Avoid release to the environment.

Methods and material for containment and cleaning up

Containment/Clean-up Measures • Sweep, shovel or vacuum up spilled material and place in appropriate container.

Section 7 - Handling and Storage

Precautions for safe handling

Handling • Use only with adequate ventilation. Minimize dust generation and accumulation. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing dusts generated from this product. Avoid contact with skin, eyes, and clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage, including any incompatibilities

Storage • Keep in properly labeled containers. Store in a cool, dry, well-ventilated place. Do not store with strong oxidizing agents.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Isopropyl alcohol (67-63-0)	TWAs	200 ppm TWA	400 ppm TWA; 980 mg/m ³ TWA	400 ppm TWA; 980 mg/m ³ TWA
	STELs	400 ppm STEL	500 ppm STEL; 1225 mg/m ³ STEL	Not established
Magnesium oxide (1309-48-4)	TWAs	10 mg/m ³ TWA (inhalable particulate matter)	Not established	15 mg/m ³ TWA (fume, total particulate)
Proprietary	TWAs		Not established	
Boric acid (10043-35-3)	STELs	6 mg/m ³ STEL (inhalable particulate matter, listed under Borate compounds, inorganic)	Not established	Not established

	TWAs	2 mg/m ³ TWA (inhalable particulate matter, listed under Borate compounds, inorganic)	Not established	Not established
Silica, amorphous (7631-86-9)	TWAs	Not established	6 mg/m ³ TWA	Not established
Zinc oxide (1314-13-2)	TWAs	2 mg/m ³ TWA (respirable particulate matter)	5 mg/m ³ TWA (dust and fume)	5 mg/m ³ TWA (fume); 15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
	STELs	10 mg/m ³ STEL (respirable particulate matter)	10 mg/m ³ STEL (fume)	Not established
	Ceilings	Not established	15 mg/m ³ Ceiling (dust)	Not established
Alumina (1344-28-1)	TWAs	1 mg/m ³ TWA (respirable particulate matter) <i>as Aluminum insoluble compounds</i>	Not established	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)

Exposure Control

Notations

ACGIH

- Alumina as Aluminum insoluble compounds: **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen).
- Isopropyl alcohol (67-63-0): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Magnesium oxide (1309-48-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Boric acid (10043-35-3): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen (listed under Borate compounds, inorganic))

Exposure Limits

Supplemental

OSHA

- Silica, amorphous (7631-86-9): **Mineral Dusts:** (20 mppcf TWA; (80)/(% SiO₂) mg/m³ TWA)
- Proprietary (Proprietary): **Mineral Dusts:** (15 mppcf TWA (respirable fraction); 5 mg/m³ TWA (respirable fraction); 50 mppcf TWA (total dust); 15 mg/m³ TWA (total dust))

ACGIH

- Alumina as Aluminum insoluble compounds: **TLV Basis - Critical Effects:** (pneumoconiosis; lower respiratory tract irritation; neurotoxicity)
- Isopropyl alcohol (67-63-0): **BEIs:** (40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific))
| TLV Basis - Critical Effects: (CNS impairment; eye and upper respiratory tract irritation)
- Magnesium oxide (1309-48-4): **TLV Basis - Critical Effects:** (metal fume fever; upper respiratory tract irritation)
- Zinc oxide (1314-13-2): **TLV Basis - Critical Effects:** (metal fume fever)
- Boric acid (10043-35-3): **TLV Basis - Critical Effects:** (upper respiratory tract irritation (listed under Borate compounds, inorganic))

Exposure controls

Engineering

Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face

- Wear safety goggles.

Skin/Body

- Wear appropriate gloves. Wear long sleeves and/or protective coveralls.

Environmental Exposure Controls • Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Key to abbreviations
 ACGIH = American Conference of Governmental Industrial Hygiene
 STEL = Short Term Exposure Limits are based on 15-minute exposures
 BEI = Biological Exposure Indices
 TLV = Threshold Limit Value determined by the American Conference of Governmental Industrial Hygienists (ACGIH)
 NIOSH = National Institute of Occupational Safety and Health
 OSHA = Occupational Safety and Health Administration
 TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Solid silicone rubber sheets.
Color	No data available	Odor	No data available
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	No data available	Water Solubility	Negligible < 0.1%
Viscosity	No data available	Explosive Properties	No data available
Oxidizing Properties:	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	No data available	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		
Other information	No additional physical and chemical parameters noted.		

Section 10: Stability and Reactivity

Reactivity

• No dangerous reaction known under conditions of normal use.

Chemical stability

• Stable under normal temperatures and pressures.

Possibility of hazardous reactions

• When heated to temperatures above 150 °C (300 °F) in the presence of air, product can form formaldehyde vapors. Safe handling conditions may be maintained by keeping vapor concentrations within the occupational exposure limit for formaldehyde. Formaldehyde may cause cancer. It is also toxic by inhalation, skin absorption and ingestion, corrosive to skin and eyes, and may cause skin sensitization and respiratory irritation. See OSHA formaldehyde standard, 29 CFR 1910.1048 Hazardous decomposition products will be formed at elevated temperatures.

Conditions to avoid

- Excess heat.

Incompatible materials

- Strong oxidizing agents.

Hazardous decomposition products

- Formaldehyde.

Section 11 - Toxicological Information

Information on toxicological effects

Components		
Cyclopentasiloxane, decamethyl - (0.05% TO 0.75%)	541-02-6	<p>Acute Toxicity: Ingestion/Oral-Rat LD50 • >24134 mg/kg;</p> <p>Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation;</p> <p>Reproductive: Inhalation-Rat TCLo • 160 ppm (1Y pre); <i>Reproductive Effects:Maternal Effects:Uterus, cervix, vagina</i></p>
Octamethylcyclotetrasiloxane (0.1% TO 0.3518%)	556-67-2	<p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 1540 mg/kg; <i>Behavioral:Tremor</i>; Inhalation-Rat LC50 • 36 g/m³ 4 Hour(s); <i>Behavioral:Excitement; Lungs, Thorax, or Respiration:Dyspnea; Skin and Appendages:Other:Hair</i>; Skin-Rabbit LD50 • 794 µL/kg; <i>Kidney, Ureter, and Bladder:Hematuria</i>;</p> <p>Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation;</p> <p>Multi-dose Toxicity: Ingestion/Oral-Mouse TDLo • 750 mg/kg 3 Day(s)-Intermittent; <i>Endocrine:Estrogenic; Related to Chronic Data:Changes in uterine weight</i>; Inhalation-Rat TCLo • 700 ppm 104 Week(s)-Intermittent; <i>Reproductive Effects:Maternal Effects:Uterus, cervix, vagina</i>;</p> <p><i>Reproductive Effects:Tumorigenic Effects:Uterine tumors; Related to Chronic Data:Changes in uterine weight</i>; Inhalation-Rat TCLo • 700 ppm 3 Day(s)-Intermittent; <i>Endocrine:Estrogenic; Related to Chronic Data:Changes in uterine weight</i>; Inhalation-Rat TCLo • 700 ppm 35 Day(s)-Intermittent; <i>Endocrine:Estrogenic; Reproductive Effects:Maternal Effects:Oogenesis; Reproductive Effects:Maternal Effects:Ovaries, fallopian tubes</i>;</p> <p>Reproductive: Inhalation-Rat TCLo • 70 ppm (70D male); <i>Reproductive Effects:Paternal Effects:Spermatogenesis</i></p>
Phosphonic acid, bis(2-ethylhexyl) ester (0% TO 0.2%)	3658-48-8	<p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 11900 mg/kg; Inhalation-Rat LC50 • >20 g/m³; Skin-Rabbit LD50 • 4500 mg/kg;</p> <p>Irritation: Eye-Rabbit • 25 mg • Mild irritation</p>
Magnesium oxide (0% TO 1%)	1309-48-4	<p>Multi-dose Toxicity: Inhalation-Rat TCLo • 1000 mg/m³ 4 Hour(s) 50 Day(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Other changes; Blood:Other hemolysis with or without anemia</i></p>

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • No data available
Skin corrosion/Irritation	OSHA HCS 2012 • No data available
Serious eye damage/Irritation	OSHA HCS 2012 • No data available
Skin sensitization	OSHA HCS 2012 • Skin Sensitizer 1
Respiratory sensitization	OSHA HCS 2012 • No data available
Aspiration Hazard	OSHA HCS 2012 • No data available
Carcinogenicity	OSHA HCS 2012 • No data available

Germ Cell Mutagenicity	OSHA HCS 2012 • No data available
Toxicity for Reproduction	OSHA HCS 2012 • Toxic to Reproduction 1B
STOT-SE	OSHA HCS 2012 • No data available
STOT-RE	OSHA HCS 2012 • No data available

Potential Health Effects

Inhalation

Acute (Immediate) • No data available.

Chronic (Delayed) • No data available

Skin

Acute (Immediate) • May cause skin sensitization. Symptoms include redness and skin rash.

Chronic (Delayed) • No data available

Eye

Acute (Immediate) • No data available.

Chronic (Delayed) • No data available

Ingestion

Acute (Immediate) • No data available.

Chronic (Delayed) • No data available

Reproductive Effects • Repeated and prolonged exposure may cause reproductive effects.

Key to abbreviations LC = Lethal Concentration
 LD = Lethal Dose
 TC = Toxic Concentration
 TD = Toxic Dose

Section 12 - Ecological Information

Toxicity

• Material data lacking.

Persistence and degradability

• Material data lacking.

Bioaccumulative potential

• Material data lacking.

Mobility in Soil

• Material data lacking.

Other adverse effects

• No studies have been found.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
TDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IMO/IMDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IATA/ICAO	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA

Special precautions for user • None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • Data lacking

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Chronic

State Right To Know				
Component	CAS	MA	NJ	PA
2-Ethylhexanol	104-76-7	Yes	No	Yes
Boric acid	10043-35-3	No	No	No
Cyclopentasiloxane, decamethyl-	541-02-6	No	No	No
Isopropyl alcohol	67-63-0	Yes	Yes	Yes
Magnesium oxide	1309-48-4	Yes	Yes	Yes
Octamethylcyclotetrasiloxane	556-67-2	No	No	No
Peroxide, bis(2,4-dichlorobenzoyl)-	133-14-2	No	No	No
Phosphonic acid, bis(2-ethylhexyl) ester	3658-48-8	No	No	No
Proprietary	Proprietary	No	No	Yes
Titanate(3-), tris[P,P-dioctyl diphosphato(2-)-O'',O''''](2-propanolato)-, trihydrogen, branched and linear	68585-78-4	No	No	No

Inventory		
Component	CAS	TSCA
2-Ethylhexanol	104-76-7	Yes
Boric acid	10043-35-3	Yes
Cyclopentasiloxane, decamethyl-	541-02-6	Yes
Isopropyl alcohol	67-63-0	Yes
Magnesium oxide	1309-48-4	Yes
Octamethylcyclotetrasiloxane	556-67-2	Yes
Peroxide, bis(2,4-dichlorobenzoyl)-	133-14-2	Yes
Phosphonic acid, bis(2-ethylhexyl) ester	3658-48-8	Yes
<i>Proprietary</i>	<i>Proprietary</i>	Yes
Titanate(3-), tris[P,P-dioctyl diphosphato(2-)-O'',O''''](2-propanolato)-, trihydrogen, branched and linear	68585-78-4	Yes

United States

Environment		
U.S. – CERCLA/SARA – Section 313 – Emission Reporting		
• Cyclopentasiloxane, decamethyl-	541-02-6	Not Listed
• Peroxide, bis(2,4-dichlorobenzoyl)-	133-14-2	Not Listed
• Phosphonic acid, bis(2-ethylhexyl) ester	3658-48-8	Not Listed
• Isopropyl alcohol	67-63-0	1.0% de minimis concentration (only if manufactured by the strong acid process, no supplier notification)
• Magnesium oxide	1309-48-4	Not Listed
• Octamethylcyclotetrasiloxane	556-67-2	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• 2-Ethylhexanol	104-76-7	Not Listed
• Boric acid	10043-35-3	Not Listed
• Titanate(3-), tris[P,P-dioctyl diphosphato(2-)-O'',O''''](2-propanolato)-, trihydrogen, branched and linear	68585-78-4	Not Listed

United States – Pennsylvania

Labor		
U.S. – Pennsylvania – RTK (Right to Know) – Environmental Hazard List		
• Cyclopentasiloxane, decamethyl-	541-02-6	Not Listed
• Peroxide, bis(2,4-dichlorobenzoyl)-	133-14-2	Not Listed
• Phosphonic acid, bis(2-ethylhexyl) ester	3658-48-8	Not Listed
• Isopropyl alcohol	67-63-0	
• Magnesium oxide	1309-48-4	Not Listed
• Octamethylcyclotetrasiloxane	556-67-2	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• 2-Ethylhexanol	104-76-7	Not Listed
• Boric acid	10043-35-3	Not Listed
• Titanate(3-), tris[P,P-dioctyl diphosphato(2-)-O'',O''''](2-propanolato)-, trihydrogen, branched and linear	68585-78-4	Not Listed

Section 16 - Other Information

- Revision Date** • 26/March/2018
- Preparation Date** • 19/December/2017
- Disclaimer/Statement of Liability** • Reasonable care has been taken in the preparation of this information, but the supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Safety Data Sheet before handling product.

Key to abbreviations

NDA = No Data Available