



MATERIAL TECHNICAL DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	: - T-Clean Passivation (400 Series)
Package	: - 5 Kg container & 35 Kg,
Application	: - Cleaning agent for stainless steel surface areas
Product Use	: - Passivation After Pickling Operations.
Item brand	: - T-Clean
Manufacturer	: - Techno services
Physical Address	: - 242 G.I.D.C kabilpor, Navsari-.396424
Business Phone	: - 99245-59751 /76220-05114
E-mail Address	: - tcleannvs@gmail.com
Web Address	: - www.tclean.in
WHMIS Classification	: - Not Regulated

2. HAZARDS IDENTIFICATION

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Corrosive Causes severe burns.

Colorless and odorless liquid.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Proportion	Classification
Nitric Acid	7697-37-2	25 – 35 %	C; R35
Sodium Dichromate	7789-12-0	05 – 10 %	-----
Other addition	-----	55 -- 70 %	-----

See section 16 for the full text of the classifications and the R-phrases declared above.

Occupational Exposure Limits, if available, are listed in section 8.

4. FIRST AID MEASURES

INHALATION :-

Move the exposed person to fresh air at once. If breathing has stopped, perform mouth-to-mouth resuscitation. Keep the affected person warm and at rest. Get medical attention as soon as possible.

SKIN :-

Immediately flush the contaminated skin with water. If this chemical penetrates the clothing, immediately remove the clothing and flush the skin with water. Get medical attention promptly.

EYES :-

Immediately wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately. Contact lenses should not be worn when working with this chemical.

INGESTION :-

Rinse out mouth and give plenty of water to drink. Seek immediate medical assistance.

5. FIRE FIGHTING MEASURES

EXTINGUISH MEDIA :-

Non-combustible, substance itself does not burn but may decompose upon heating. Use dry chemical, CO₂ or water spray do not use alcohol-resistant foam.

FIRE FIGHTING PROCEDURES :-

Move containers from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Stay away from ends of tanks.

UNUSUAL HAZARDS :-

The substance decomposes on warming producing nitrogen oxides. The substance reacts violently with combustible and reducing materials, e.g., turpentine, charcoal, alcohol. The substance is an acid; it reacts with bases and is corrosive to metals.



HAZARDOUS COMBUSTION PRODUCTS :-

It may decompose upon heating to produce corrosive and/or toxic fumes. Contact with metals may evolve flammable hydrogen gas.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS :-

Evacuate the area where concentrated fumes are present. Clean up personnel must wear proper protective equipment (see section 8).

ENVIRONMENTAL PRECAUTIONS :-

Avoid contamination of ground and surface waters. Do not flush to sewer. All spills or leaks of this material must be handled and disposed.

METHODS FOR CLEANING UP :-

Ensure ventilation is adequate. Shut off all sources of ignition. Wear protective equipment to prevent skin and eye contamination and inhalation of vapours. Use absorbent (soil, sand, vermiculite or other inert material). Collect and seal in properly labeled drums for disposal.

7. HANDLING & STORAGE

HANDLING :-

Do not taste or swallow material. Avoid contact with skin and avoid breathing mist. Do not eat, drink or smoke in work area. Any protective clothing or shoes, which become contaminated, should be removed immediately and thoroughly laundered before reuse.

STORAGE :-

Store in a cool place out of direct sunlight. Store in well ventilated area. Store separated from combustible and reducing substances, bases, food and feedstuffs, organic chemicals. Keep in a well-ventilated room.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

Name of Substance : Nitric Acid

OSHA Permissible Exposure Level (PEL) :- 8 hour time-weighted average 2ppm

ACGIH Threshold Limit Value (TLV) :- short term exposure limit 4ppm

ACGIH Threshold Limit Value (TLV) :- time-weighted average 2 ppm

PERSONAL PROTECTION

Eye and face protection :- Wear chemical safety goggles, or face shield

Skin protection :- Wear protective gloves & protective clothing.

Respiratory protection :- Do not eat or drink in the working area, avoid breathing vapours.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:- Clear liquid
Colour	:- Colourless
Odour	:- Characteristic odour
Boiling Point Range	:- >100°C
Melting Point Range	:- 0°C
Flash Point	:- Not Applicable
Auto ignition Temperature	:- Not Available
Lower Explosion Limit (vol %)	:- Not Available
Upper Explosion Limit (vol %)	:- Not Available
Vapour Pressure	:- Not Available
Relative vapor density (air=1)	:- Not Available
Specific Gravity (gr/cm ³)	:- 1.20 at 15°C
Bulk Density (kg/m ³)	:- Not Available
Solubility	:- Appreciable
PH Value	:- 1



10 . STABILITY AND REACTIVITY

STABILITY :

The product is stable under normal conditions.

CONDITIONS TO BE AVOIDED :-

Avoid heating, high temperatures and open flame. The substance decomposes on warming producing nitrogen oxides.

MATERIALS TO BE AVOIDED :-

Avoid reducing materials, e.g., turpentine, charcoal, alcohol. The substance is a strong acid; it reacts violently with bases and is corrosive to metals. Reacts very violently with organic chemicals (e.g., acetone, acetic acid, and acetic anhydride), causing fire and explosion hazard. Attacks some plastics

HAZARDOUS DECOMPOSITION PRODUCTS :-

May give off poisonous oxides of nitrogen & acid fumes when heated in fires (see section 5).

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA

Name of Substance :- Nitric Acid

Oral human lowest published lethal dose :- 430 mg/kg

Unreported route man lowest published lethal dose :- 110 mg/kg

- Inhalation** :- May cause burning sensation, cough and laboured breathing.
- Skin contact** :- Corrosive, it causes serious skin burns, pain and yellow discolouration.
- Eye contact** :- May cause redness pain and severe deep burns.
- Ingestion** :- Corrosive. It causes abdominal pain burning sensation and shock.

12. ECOLOGICAL INFORMATION

ECO TOXICOLOGICAL DATA

Name of Substance:- Nitric Acid

Ecotoxicity Values

LC50 Shore crab 180mg/l :- 48 hr, Static, aerated water conditions.

LC50 Cockle 330-1000 mg/l :- 48 hr, Aerated water conditions.

LC50 Starfish 100-300 mg/l :- 48 hr, Aerated water conditions.

DEGRADATION

Avoid contaminating waterways. Product is biodegradable.

BIOACCUMULATION

No specific biodegradation test data located.

13. DISPOSAL CONSIDERATIONS

SPILLAGE DISPOSAL

Evacuate danger area! Consult an expert! Collect leaking liquid in sealable containers. Cautiously neutralize remainder with sodium carbonate. Then wash away with plenty of water. Do not absorb in saw-dust or other combustible absorbents (extra personal protection: complete protective clothing including self-contained breathing apparatus).

14. TRANSPORTATION INFORMATION

Proper shipping name : Nitric Acid, Solution LAND

Transport		Sea Transport		Air Transport	
UN number	3264	UN number	3264	UN number	3264
ADR class	8	Ems	F-A, S-B	IATA/ICAO class	8
RID-class	8	IMDG class	8	Packing group	III
		IMDG packing group	III		

PLOT: 242 / 243, G.I.D.C., KABILPORE, NAVSARI - 396 424. TEL.: 7622005114/ Mobile: +91 99245 59751

E-Mail: tcleanvs@gmail.com/ rdeepeshq@yahoo.com / web.www.tclean.in



15. REGULATORY INFORMATION

LABELING ACCORDING TO EC DIRECTIVES

Symbol	:	C	
R-phrases	R35		Causes severe burns.
	S2		Keep out of the reach of children.
	S23		Do not breathe gas/vapors.
	S24		Avoid contact with skin.
	S26		In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S-phrases	S36/37/39		Wear suitable protective clothing, gloves and eye/face protection.
	S45		In case of accident or if you feel unwell, seek medical advice immediately
	S38		In case of insufficient ventilation, wear suitable respiratory equipment.

16. OTHER INFORMATION

Person using this product. Product use and conditions of use are beyond the control of T-clean. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, This SDS format is in accordance with T-clean provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained expressed or implied, are made.