

DN-3302-H
Version: 2013

Deblock Solution
Revision: 2022

MATERIAL SAFETY DATA SHEET

SECTION 1: Product's Identification and Company Information

Product name : **Deblock Solution**
Chemical Name /Combination 7.4/1000 Trifluoroacetic acid/Toluene (v/v)]
Catalog Number: **DN-3302-H**
Synonym/Trade Name: TFA / Toluene Solution, Deblock T,
Deblocking Solution, DMT Removal Solution
Recommended use: Laboratory Use only
Manufacturer or supplier's ChemGenes India Pvt. Ltd
207, Regency Plaza, 5-Park Road
Lucknow-226 001,U.P, India,
Ph: +91 86874 21036,
Email: info@chemgenesindia.com

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Flammable liquids (Category 2), H225 Skin irritation (Category 2), H315
Reproductive toxicity (Category 2), H361d
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336 Specific target organ toxicity - repeated exposure (Category 2), Central nervous system, H373
Aspiration hazard (Category 1), H304
Long-term (chronic) aquatic hazard (Category 3), H412
For the full text of the H-Statements mentioned in this Section, see Section 16.
- 2.2 Label elements
Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

DN-3302-H
Version: 2013

Deblock Solution
Revision: 2022

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 Avoid release to the environment.
P301 + P310 + P331
IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Supplemental Hazard
Statements none

Reduced Labeling (<= 125 ml)

Pictogram



Hazard statement(s)

H304 May be fatal if swallowed and enters airways.
H412 Harmful to aquatic life with long lasting effects.
H361d Suspected of damaging the unborn child.

Precautionary statement(s)

P201 Obtain special instructions before use.
P301 + P310 + P331
IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Supplemental Hazard
Statements none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Component

Classification

TRIFLUORACETIC ACID

DN-3302-H
Version: 2013

Deblock Solution
Revision: 2022

CAS# 76-05-1 Hazard statements H314, H332, H412
Chemical formula C₂H₅F₃O₂
EC Number: 200-929-3

TOLUENE

CAS-No. 108-88-3 Flam. Liq. 2; Skin Irrit. 2;
EC-No. 203-625-9 Repr. 2; STOT SE 3; STOT
Index-No. 601-021-00-3 RE 2; Asp. Tox. 1; Aquatic
Registration 01-2119471310-51- Chronic 3; H225, H315,
number XXXX H361d, H336, H373,
H304, H412
Concentration limits:
20 %: STOT SE 3, H336;

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first-aid measures

General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media Suitable extinguishing media

Dry powder Dry sand

Unsuitable extinguishing media

Do NOT use water jet.

DN-3302-H
Version: 2013

Deblock Solution
Revision: 2022

- 5.2 Special hazards arising from the substance or mixture
Carbon oxides
- 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
- 5.4 Further information
Use water spray to cool unopened containers.
- Flash point 4 °C

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
For personal protection see section 8.
- 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- 6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
- 6.4 Reference to other sections
For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling Advice on safe handling
- Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.
- Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
- Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities
Storage conditions

DN-3302-H
Version: 2013

Deblock Solution
Revision: 2022

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

- 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters
Ingredients with workplace control parameters

- 8.2 Exposure controls

Personal protective equipment

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).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties
- | | | |
|----|--|--|
| a) | Appearance | Form: clear, liquid
Color: colorless |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | No data available |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | 4 °C |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Density | 0.870 g/cm ³ |
| | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Autoignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | Viscosity, kinematic: No data available
Viscosity, dynamic: No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |
- 9.2 Other safety information
No data available

SECTION 10: STABILITY AND REACTIVITY

- 10.1 Reactivity
No data available
- 10.2 Chemical stability
Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions

DN-3302-H
Version: 2013

Deblock Solution
Revision: 2022

- 10.4 No data available
Conditions to avoid
Heat, flames and sparks.
- 10.5 Incompatible materials
Steel (all types and surface treatments), Strong bases, Oxidizing agents,
Alkali metals, Strong oxidizing agents, Metals, Alcohols, Exothermic in
contact with water, Reacts violently with:, Aluminum, Epoxides
- 10.6 Hazardous decomposition products
In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects Mixture
- Acute toxicity
Oral: No data available
Inhalation: No data available
Dermal: No data available
- Skin corrosion/irritation
No data available
- Serious eye damage/eye irritation
No data available
- Respiratory or skin sensitization
No data available
- Germ cell mutagenicity
No data available
- Carcinogenicity
No data available
- Reproductive toxicity
No data available
- Specific target organ toxicity - single exposure
No data available
- Specific target organ toxicity - repeated exposure
No data available
- Aspiration hazard
No data available
- 11.2 Additional Information

DN-3302-H
Version: 2013

Deblock Solution
Revision: 2022

Lung irritation, chest pain, pulmonary edema, Inhalation studies on toluene have demonstrated the development of inflammatory and ulcerous lesions of the penis, prepuce, and scrotum in animals.

Components Toluene

Acute toxicity

LD50 Oral - Rat - male - 5.580 mg/kg (Tested according to Directive 92/69/EEC.)

LC50 Inhalation - Rat - male and female - 4 h - 25,7 mg/l (OECD Test Guideline 403)

LD50 Dermal - Rabbit - > 5.000 mg/kg Remarks: (ECHA)

Skin corrosion/irritation

Skin - Rabbit

Result: irritating - 4 h

Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: slight irritation

(OECD Test Guideline 405)

Respiratory or skin sensitization Maximization Test - Guinea pig Result: negative
(Regulation (EC) No. 440/2008, Annex, B.6)

Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test Test system: Mouse
lymphoma test

Result: negative

Test Type: Ames test

Test system: S. typhimurium Result: negative

Species: Rat - Bone marrow Result: negative

Remarks: (ECHA)

Carcinogenicity

No data available

Reproductive toxicity

Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness. - Central nervous system

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure. - Central nervous system

Aspiration hazard

Aspiration hazard, Aspiration may cause pulmonary edema and pneumonitis.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Mixture

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Toxic to aquatic life.

Components

Toluene

Toxicity to fish flow-through test LC50 - Oncorhynchus kisutch (coho salmon) - 5,5 mg/l - 96 h
Remarks: (ECHA)

Toxicity to daphnia
and other aquatic
invertebrates EC50 - Ceriodaphnia dubia (water flea) - 3,78 mg/l - 48 h
(US-EPA)

Toxicity to bacteria static test EC50 - Bacteria - 84 mg/l - 24 h
Remarks: (ECHA)

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

DN-3302-H
Version: 2013

Deblock Solution
Revision: 2022

Contaminated packaging
Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

- 14.1 UN number
ADR/RID: 1294 IMDG: 1294 IATA: 1294
- 14.2 UN proper shipping name
ADR/RID: TOLUENE, SOLUTION
IMDG: TOLUENE, SOLUTION
IATA: Toluene, SOLUTION
- 14.3 Transport hazard class(es)
ADR/RID: 3 IMDG: 3 IATA: 3
- 14.4 Packaging group
ADR/RID: II IMDG: II IATA: II
- 14.5 Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no
- 14.6 Special precautions for user
No data available

SECTION 15: REGULATORY INFORMATION

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorisations and/or restrictions on use
REACH - Restrictions on the manufacture, : Toluene
placing on the market and use of certain
dangerous substances, preparations and articles
(Annex XVII)

National legislation
Seveso III: Directive 2012/18/EU of the European : FLAMMABLE LIQUIDS
Parliament and of the Council on the control of
major-accident hazards involving dangerous
substances.

- 15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

- H225 Highly flammable liquid and vapor.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H412 Harmful to aquatic life with long lasting effects.

Further 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. ChemGenes India Pvt. Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.

-----End of MSDS-----