

SECTION 1: Identification

Product Identifier

Tradename TC-3075DA

Recommended use of the chemical and restrictions on use

Industrial use only. Cleaning and coating solvent, vapor degreasing, defluxing applications. Cleaning of electronics and precision cleaning applications. Vapor degreasing, defluxing applications, cleaning of electronics and precision cleaning applications. Cleaning, rinsing, and drying agent, cleaning of rosin solder flux residue, oils, greases, and waxes. Limitations for use on medical device applications.

Restrictions on use

TC-3075DA may be used in a wide variety of applications including precision cleaning of medical devices. For applications when the finished device is to be implanted in the human body no TC-3075DA may remain on the parts. It is strongly recommended that the supporting test results and protocols be cited during FDA registration. The customer is responsible for evaluating and determining that TC-3075DA is suitable and appropriate for its particular use. It is essential that the user evaluate and determine if TC-3075DA is suitable and appropriate for particular use and comply with all applicable laws, regulations, standards, and guidance.

Details of the supplier of the safety data sheet

Supplier Tyrell-Chemical L.L.C.
 1 Alhambra Plaza PH Floor Coral Gables FL 33134
 Phone Number: +1-786-633-0019

Emergency Telephone Number

Emergency Telephone Number +1-786-633-0019
 Reference Number TM 3075DA

SECTION 2: Hazard(s) Identification

Classification of the substance or mixture

Classifications according to OSHA Hazard Communication Standard (29 CFR 1910.1200)



GHS07

Skin Irrit. 2 H315 Causes Skin Irritation
 Eye Irrit. 2A H319 Causes Serious Eye Irritation
 STOT SE 3 H335 May Cause Respiratory Irritation

Information concerning particular hazards for human and environment

The product has to be labelled due to the calculation procedure of OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification system

The classification is according to the latest edition of OSHA Hazard Communication Standard (29 CFR 1910.1200), and extended by company and literature data.

- Label Elements
- Labelling according to OSHA Hazard Communication Standard (29 CFR 1910.1200)
- Hazard Pictograms

Revised 10.18.22

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



GHS07

Signal word *Warning*

Hazard-determining components of labelling

Hazard Statements (GHS-US)

H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H412	Harmful to aquatic life with long lasting effects

Precautionary statements (GHS-US)

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment
P280	Wear protective gloves / eye protection / face protection.
P302+P352	If on skin: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a poison center or doctor if you feel unwell.
P321	Specific treatment (see supplemental first aid instructions on this label).
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in an approved waste disposal plant

Hazards not otherwise classified (HNOC) *No further relevant information available.*

Unknown acute toxicity (GHS US) *Not applicable*

SECTION 3: Composition/information on ingredients

Substance

Substance Type	Mixture	
CAS No.	Description	% by wt *
138495-42-8	1,1,1,2,2,3,4,5,5,5-decafluoropentane	61-63% (approx.)
156-60-5	Trans, 1,2-Dichloroethylene	37-39% (approx.)
67-63-0	Isopropyl alcohol	2% (approx.)

* The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret

SECTION 4: First-aid measures

Description of first aid measures

General description

Immediately remove any clothing soiled by the product. In case of accident or if you feel unwell, seek medical advice immediately. Show this Safety Data Sheet to the medical personnel. Move the affected person from the contaminated area.

After Inhalation

No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical advice/attention if discomfort continues. If not breathing give artificial respiration. In case of unconsciousness place patient on side for transportation.

After skin contact

Immediately wash with water and soap and rinse thoroughly. Get medical advice/attention.

After eye contact

Immediately flush eyes thoroughly with water. Remove contact lenses, if present and easy to do so. Continue rinsing. Get medical advice/attention if discomfort continues.

After ingestion

No specific recommendation. If throat irritation or coughing persists proceed as follows. Rinse mouth out with water. Get medical advice / attention if any discomfort continues.

Most important symptoms and effects, both acute and delayed

Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

Indication of any immediate medical attention and special treatment needed

Not applicable

SECTION 5: Fire-fighting measures

Extinguishing Media

Suitable extinguishing agents Carbon dioxide (CO₂) Foam dry powder

Special hazards arising from the substance or mixture

Exposure to extreme heat may allow for thermal decomposition. Materials may form flammable/explosive vapor air mixture.

Fire hazard Thermal decomposition generates: Carbon oxides, hydrogen fluoride

Explosion hazard Risk of explosion if heated under confinement due to excessive pressure buildup as well as thermal decomposition.

Special protective equipment and precautions for firefighters

Firefighting instructions Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignored use water spray to disperse vapors and protect personnel stopping the leak.

Protective equipment Wear gas tight chemically protective clothing in combination with self-contained breathing apparatus (SCBA) and appropriate clothing including helmets, protective boots, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental Release Measures

Personal Precautions, protective equipment and emergency procedures

General Measures	Evacuate unnecessary personnel Ensure adequate air ventilation. Do not breathe gas, fumes, vapor, or spray.
For non-emergency personnel	
Emergency procedures	Only qualified personnel equipped with suitable protective equipment may intervene
For Emergency Responders	
Protective Equipment	Do not attempt to take action without suitable equipment. For further information refer to section 8 "Exposure controls/personal protection"
Emergency Procedures	Gas/vapor heavier than air. May accumulate in confined spaces, particularly at or below ground level.

Environmental Precautions

Dilute with plenty of water. Do not allow to enter sewers / surface or ground water. Notify authorities if product enters sewers or public waters. For larger spills, cover drains and built dikes to prevent entry into sewer or bodies of water.

Methods and material for containment and cleaning up

For containment	Stop leak if safe to do so. Dike up recovery or absorb with appropriate material.
Methods for cleaning up	Eliminate all potential ignition sources when cleaning up spill. Contain spill. Work from the edges inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect spilled material and place in a closed container approved for transportation. Clean up residue with appropriate solvent. Ventilate the area with fresh air. Seal the container
Other information	Dispose contaminated material as waste according to section 13. Ensure adequate ventilation

SECTION 7: Handling and Storage

Precautions for safe handling

Contents may be under pressure, open carefully. Do not breathe thermal decomposition products. For industrial use only. Not for consumer sale or use. Store work clothes separately from other clothing, food and tobacco products. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents. No smoking. Keep away from sparks, flames, and extreme heat.

Wear protective clothing as described in section 8 of this safety data sheet. Keep away from food, drink, and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

For the general occupational hygienic measures refer to Section 8.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated space. Keep container tightly closed. Store away from heat. Store at temperatures not to exceed 52°C/125°F. Store away from strong bases. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

Occupational Exposure Limits

CAS number	Ingredient	Limit Type
156-60-5	Trans, 1,2-Dichloroethylene	200 ppm (8 & 12 hr. TWA)
138495-42-8	1,1,1,2,2,3,4,5-difluoropentane	400 ppm Ceiling Limit Value

Exposure Controls

Engineering Controls

Provide appropriate local exhaust when the product is heated. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Exposure Limits and control dust/fume/gas/mist/spray/vapors. If ventilation is not adequate, use respiratory equipment. Provide ventilation adequate to maintain vapor concentration below lower explosive concentration.

Personal protective equipment

Protection for hands and skin

Protective gloves 29 CFR 1910.138 Hand Protection. When the product is subjected to extreme heat, HF may be formed. For those cases neoprene gloves and apron are recommended.

Eye protection

Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and face protection. Goggles should be indirect vented goggles.

Hygiene Measures

Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking, or using the toilet. Do not eat, drink, or smoke when using this product.

Respiratory Protection

During heating use a positive pressure supplied air respirator if there is a potential for over exposure from an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. Half face or full-face air purifying respirator suitable for organic vapors. Note that organic vapor respirators may have a short service life. Contact your respirator manufacturer for suitability for specific applications.

Other information

Safety Shoes 29 CFR 1910.136: Foot Protection

SECTION 9: Physical and Chemical Properties

General information

Appearance

Form

Liquid

Color

Colorless

Odor

Ether-like

Odor Threshold

No data available

pH

neutral

Change in condition

Initial boiling point and boiling range

39° C (102.2 °F)

Flash point:

No data available

Flammability (solid, gaseous)

No data available

Auto-ignition temperature

No data available

Decomposition temperature	No data available
Explosion limits	
Lower	12.8% (CAMEO)
Upper	9.7% (CAMEO), 5.6% (NIOSH)
Vapor pressure	No data available
Density	1.410 g/cm ³
Relative Density	No data available
Vapor Pressure	464 mmHg
Vapor density	5.4 (air=1)
Evaporation Rate	No data available
Solubility in / miscibility with water	15g/l)
Partition coefficient (n-octanol/water)	Not available
Viscosity	
Dynamic	No data available
Kinematic	No data available
Other information	No further relevant information available.

SECTION 10: Stability and reactivity

Reactivity	This product may be reactive with certain agents under certain conditions, see remaining headings in this section
Stability	Stable at normal ambient temperature and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	Hazardous polymerization will not occur
Conditions to avoid	Heat, sparks, flames
Materials to avoid	Alkali metals or alkaline earth metals, powder metal, powdered metal salt, strong alkali/bases, strong oxidizing agents
Hazardous decomposition	Hazardous decomposition products formed under fire conditions. Fluorinated hydrocarbons, hydrogen fluoride, carbon dioxide (CO ₂), carbon monoxide

SECTION 11: Toxicological Information

Acute toxicity

Name	Route	Species	Value
Overall Product	Dermal		No data available
Overall Product	Inhalation Vapor (4 hr.)		No data available
Overall Product	Ingestion		No data available
trans, 1,2-Dichloroethylene	Dermal	Rabbit	LD50 > 5,000 mg/kg
trans, 1,2-Dichloroethylene	Inhalation Vapor (4 hr.)	Rat	LD50 95.6 mg/l
trans, 1,2-Dichloroethylene	Ingestion	Rat	LD50 7,902 mg/kg
2H,3H-Decafluoropentane	Dermal	Rabbit	LD50 > 5,000 mg/kg
2H,3H-Decafluoropentane	Inhalation Vapor (4 hr.)	Rat	LC50 114mg/l
2H,3H-Decafluoropentane	Ingestion	Rat	LD50 > 5,000 mg/kg
Isopropyl alcohol	Dermal	Rabbit	LD50 > 12,870 mg/kg
Isopropyl alcohol	Inhalation Vapor (4 hr.)	Rat	LC50 72.6 mg/l
Isopropyl alcohol	Ingestion	Rat	LD50 4,710 mg/kg

Skin Irritation	Species	Value
trans, 1,2-Dichloroethylene	Rabbit	Minimal irritation
2H,3H-Decafluoropentane	Rabbit	No skin irritation
Isopropyl alcohol	Multiple species	no significant irritation

Eye Irritation	Species	Value
trans, 1,2-Dichloroethylene	Rabbit	Moderate irritant
2H,3H-Decafluoropentane	Rabbit	No eye irritation
Isopropyl alcohol	Rabbit	Severe Irritant

Skin Sensitization	Species	Value
2H,3H-Decafluoropentane	Guinea Pig	not classified
Isopropyl alcohol	Guinea Pig	not classified

Reproductive Toxicity	Species	Value	Route
trans, 1,2-Dichloroethylene	Rat	not classified	Inhalation
Isopropyl alcohol	Rat	not classified	Inhalation
Isopropyl alcohol	Rat	not classified	Ingestion

SECTION 12: Ecological Information

Toxicity

Aquatic toxicity

Fathead Minnow - 96 hours LC50 - 27.2 mg/l
Rainbow Trout - 96 hours LC50 - 13.9 mg/l
Daphnia Magna - 48 hours LC50 - 11.7 mg/l
Green Algae – 72 hours EC50 - 120 mg/l

Persistence and degradability

Not readily biodegradable

Bio accumulative potential

Bioaccumulation is unlikely

Mobility in soil

No further relevant information available.

Other adverse effects

No further relevant information available.

Ecotoxicity

Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

SECTION 12: Ecological Information

Waste treatment methods

General Information

Dispose of waste in a permitted industrial waste facility. As a disposal alternative incinerate in a permitted waste incineration facility. Proper destruction may require use of additional fuel during incineration process. Facility must be capable of handling halogenated materials. Empty containers shall be considered hazardous unless otherwise defined.

Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packages

Recommendation

Disposal must be made according to official regulations. Dispose of surplus product and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse. Incineration or landfill should only be considered when reuse is not feasible. Waste should not be disposed of untreated to the sewer.

SECTION 14: Transport Information

General The product is not covered by international regulations on the transport of dangerous goods (IDMG, IATA, DOT)

UN-Number

DOT, IDMG, IATA Not applicable

UN proper shipping name Not applicable
DOT, IDMG, IATA

Transport Hazard class(es) Not applicable
Class

Label -

Packaging Group

DOT, IDMG, IATA Not applicable

Environmental hazards

Marine Pollutant No

Special precautions for user Not applicable

Transportation in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable
UN "Model Regulation" Not applicable

SECTION 15: Regulatory information

US Federal Regulations

TSCA (Toxic Substances Control Act)

Listed on the United States TSCA inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This material contains a chemical which requires export notification under TSCA section 12[b]:

Ingredient	CAS Number	Regulation	Status
Trans 1,2-dichloroethylene	156-60-5	Toxic Substances Control Act (TSCA) 4 Test rules chemicals	Applicable
2H,3H-Decafluoropentane	138495-42-8		

TSCA Section 5, Significant New Use Rule (SNUR; 40 CFR 721.5645). The approved uses are: precisions and general cleaning, carrier fluid, displacement drying, printed circuit board cleaning, particulate removal and film cleaning, process medium, heat transfer fluid (dielectric and non-dielectric), and test fluid. Processors and users of this substance must also comply with the applicable general SNUR requirements set forth in 40 CFR 721 Subpart A, including export notification requirements if applicable (40 CFR 721.20) and the applicable record keeping requirements set forth at 40 CFR 721.125

International Regulations

CANADA

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National Regulations

Listed on AICS (Australian Inventory of Chemical Substances)

Listed on the IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Korean ECL (Existing Chemicals List)

Listed on the NZIoC (New Zealand Inventory of Chemicals)

Listed on the PICCS (Philippines Inventory of Chemicals and Chemical Substances)

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

Chemicals known to cause cancer

Substance is not listed

Chemicals known to cause reproductive toxicity for females

Substance is not listed

Chemicals known to cause reproductive toxicity for males

Substance is not listed

Chemicals known to cause developmental toxicity

Substance is not listed

Massachusetts Right-To-Know List

Substance is not listed

Minnesota Right-To-Know List

Substance is not listed

New Jersey Right-To-Know List:

Substance is not listed

New Jersey Special Hazardous Substance List

Substance is not listed

Pennsylvania Right-To-Know List

Substance is not listed

Pennsylvania Special Hazardous Substance List

Substance is not listed

Rhode Island Right to Know list

Substance is not listed

Carcinogenicity Categories

EPA (Environmental Protection Agency)

Substance is not listed

TLV (Threshold Limit Value established by ACGIH)

Substance is not listed

NIOSH-ca (National Institute for Occupational Safety and Health)

Substance is not listed

SECTION 16: Other Information:

The contents and format of this SDS are in accordance with 29 CFR 1910.1200

Training Advice

Only trained personnel should use this material

Issued by

Tyrell Chemical LLC

Date of Preparation / last revision

2025-06-23

Supersedes Date

2022-10-18

Revision

4

SDS status

Approved

NFPA Health Hazard	3 – due to emergency situations where the material may thermally decompose and release Hydrogen Fluoride.	
NFPA Fire Hazard	1 – Materials that will not burn	
NFPA Reactivity	0 – Normally stable even under fire exposure conditions and are not reactive with water	

Abbreviations and acronyms:

ACGIH:	American Conference of Governmental Industrial Hygienists
AICS:	Australian Inventory of Chemical Substances
CAS:	Chemical Abstracts Services (Division of the American Chemical Society)
CERCLA:	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
DOT:	US Department of Transportation
DSL	Domestic Substances List
ECL:	Existing Chemicals List
EPA:	Environmental Protection Agency
Eye Irrit. 2a:	Serious Eye damage/eye irritation – Category 2A
IECSC:	Inventory of Existing Chemical Substances Produced or Imported in China
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
LC50:	Lethal Concentration, 50 percent
LD50:	Lethal Dose, 50 percent
NIOSH:	National Institute for Occupational Safety
NZIoC:	New Zealand Inventory of Chemicals
OSHA:	Occupational Safety and Health
PICCS:	Philippines Inventory of Chemicals and Chemical Substances
SARA:	Superfund Amendments and Reauthorization Act
Skin Irrit. 2:	Skin corrosion/irritation – Category 2
STOT SE 3:	Specific target organ toxicity (single exposure) – Category 3
TLV:	Threshold Limit Value

DISCLAIMER OF LIABILITY

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and for other reasons we do not assume and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product then this SDS information may not be applicable. The above information is believed to be correct and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is offered solely for your consideration, investigation, and verification. It does not represent any guarantee of the properties of the product nor that the hazard precautions or procedures described are the only ones that exist. Tyrell Chemical LLC shall not be held liable for any damage resulting from handling or from contact with the above product

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