according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 06/18/2025 1328695-00052 Date of first issue: 02/27/2017 8.0

### **SECTION 1. IDENTIFICATION**

Product name DryFilm RA/IPA

Product code D12340580

SDS-Identcode 130000001461

### Manufacturer or supplier's details

Company name of supplier The Chemours Company FC, LLC

Address 1007 Market Street

Wilmington, DE 19801 United States of America (USA)

Telephone 1-844-773-CHEM (outside the U.S. 1-302-773-1000)

Medical emergency: 1-866-595-1473 (outside the U.S. 1-302-Emergency telephone

773-2000); Transport emergency: +1-800-424-9300 (outside

the U.S. +1-703-527-3887)

#### Recommended use of the chemical and restrictions on use

Recommended use Dry lubricant

Restrictions on use For industrial use only.

> Do not use or resell Chemours™ materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless agreed to by Seller in a written agreement covering such use. For further information,

please contact your Chemours representative.

#### **SECTION 2. HAZARDS IDENTIFICATION**

## GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids : Category 2

Eye irritation Category 2A

Specific target organ toxicity

single exposure

: Category 3

## Other hazards

The thermal decomposition vapors of fluorinated plastics may cause polymer fume fever with flulike symptoms in humans, especially when smoking contaminated tobacco. Vapors may form explosive mixture with air.

#### **GHS** label elements

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

Hazard pictograms





Signal Word : Danger

Hazard Statements : H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary Statements : Prevention:

P210 Keep away from heat, sparks, open flame and hot surfac-

es. No smoking.

P233 Keep container tightly closed.

P241 Use explosion-proof electrical, ventilating and lighting

equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P261 Avoid breathing mist or vapors. P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves, protective clothing, eye protection

and face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately

all contaminated clothing. Rinse skin with water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel

unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical attention.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents and container to an approved waste

disposal plant.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

#### Components

Chemical na	CAS No./Unique ID	Concentration (% w/w)	Trade secret

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

Propan-2-ol 67-63-0\* >= 65 - <= 85 TSC

TSC- the actual concentration or concentration range is withheld as a trade secret

#### **SECTION 4. FIRST AID MEASURES**

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact : In case of contact, immediately flush skin with plenty of water.

Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention.

If swallowed, DO NOT induce vomiting.

Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and

delayed

Inhalation may provoke the following symptoms:

Polymer fume fever

Eye contact may provoke the following symptoms

Irritation

Causes serious eye irritation. May cause drowsiness or dizziness.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician : Treat symptomatically and supportively.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

High volume water jet

<sup>\*</sup> Indicates that the identifier is a CAS No.

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

Specific hazards during fire

fighting

Do not use a solid water stream as it may scatter and spread

fire

Flash back possible over considerable distance. Vapors may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

ucts

Carbon oxides
Hydrogen fluoride
carbonyl fluoride

potentially toxic fluorinated compounds

aerosolized particulates

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

Special protective equipment :

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protec: :

tive equipment and emer-

gency procedures

Remove all sources of ignition.

Ventilate the area.

Use personal protective equipment.

Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

Environmental precautions : Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g., by containment or

oil barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Non-sparking tools should be used.

Soak up with inert absorbent material.

Suppress (knock down) gases/vapors/mists with a water spray

jet.

For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

**SECTION 7. HANDLING AND STORAGE** 

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust

ventilation.

Use explosion-proof electrical, ventilating and lighting equip-

ment.

Advice on safe handling : Avoid breathing mist or vapors.

Do not swallow. Do not get in eyes.

Avoid prolonged or repeated contact with skin.

Wash skin thoroughly after handling.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as-

sessment

Non-sparking tools should be used. Keep container tightly closed.

Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

Take precautionary measures against static discharges.

Take care to prevent spills, waste and minimize release to the

environment.

Do not breathe decomposition products.

Conditions for safe storage : Keep in properly labeled containers.

Store locked up. Keep tightly closed.

Keep in a cool, well-ventilated place.

Store in accordance with the particular national regulations.

Keep away from heat and sources of ignition.

Materials to avoid : Do not store with the following product types:

Strong oxidizing agents

Self-reactive substances and mixtures

Organic peroxides Flammable solids Pyrophoric liquids Pyrophoric solids

Self-heating substances and mixtures

Substances and mixtures which in contact with water emit

flammable gases Explosives Gases

Very acutely toxic substances and mixtures

according to the OSHA Hazard Communication Standard



# **DryFilm RA/IPA**

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		ST	500 ppm 1,225 mg/m <sup>3</sup>	NIOSH REL
		TWA	400 ppm 980 mg/m <sup>3</sup>	NIOSH REL
		TWA	400 ppm 980 mg/m <sup>3</sup>	OSHA Z-1

## Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Hydrogen fluoride	7664-39-3	TWA	0.5 ppm (Fluorine)	ACGIH
		С	2 ppm (Fluorine)	ACGIH
		TWA	3 ppm	OSHA Z-2
		С	6 ppm 5 mg/m³	NIOSH REL
		TWA	3 ppm 2.5 mg/m <sup>3</sup>	NIOSH REL
Carbonyl difluoride	353-50-4	TWA	2 ppm	ACGIH
		STEL	5 ppm	ACGIH
		TWA	2 ppm 5 mg/m³	NIOSH REL
		ST	5 ppm 15 mg/m³	NIOSH REL
Carbon dioxide	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		TWA	5,000 ppm 9,000 mg/m <sup>3</sup>	NIOSH REL
		ST	30,000 ppm 54,000 mg/m <sup>3</sup>	NIOSH REL
		TWA	5,000 ppm 9,000 mg/m <sup>3</sup>	OSHA Z-1
Carbon monoxide	630-08-0	TWA	25 ppm	ACGIH
		TWA	35 ppm 40 mg/m³	NIOSH REL
		С	200 ppm 229 mg/m³	NIOSH REL

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version **Revision Date:** SDS Number: Date of last issue: 10/09/2024 06/18/2025 1328695-00052 Date of first issue: 02/27/2017 8.0

**TWA** 50 ppm OSHA Z-1 55 mg/m<sup>3</sup>

#### Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sam- pling time	Permissible concentration	Basis
Propan-2-ol	67-63-0	Acetone	Urine	End of shift at end of work- week	40 mg/l	ACGIH BEI

**Engineering measures** 

Processing may form hazardous compounds (see section

Minimize workplace exposure concentrations.

If sufficient ventilation is unavailable, use with local exhaust

ventilation.

Use explosion-proof electrical, ventilating and lighting

equipment.

#### Personal protective equipment

Respiratory protection

General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release. exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate

protection.

Hand protection

Material Chemical-resistant gloves

Remarks Choose gloves to protect hands against chemicals depending

> on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Take note that the product is flammable, which may impact the selection of hand protection. Wash hands before breaks and at the end of workday.

Eye protection Wear the following personal protective equipment:

Safety goggles

Skin and body protection Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 06/18/2025 1328695-00052 Date of first issue: 02/27/2017 8.0

Wear the following personal protective equipment:

If assessment demonstrates that there is a risk of explosive atmospheres or flash fires, use flame retardant antistatic

protective clothing.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

If exposure to chemical is likely during typical use, provide Hygiene measures

eye flushing systems and safety showers close to the wor-

king place.

When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** liquid

Color translucent, white to off-white

Odor alcohol-like

Odor Threshold No data available

pΗ 4 - 7

Melting point/freezing point -128 °F / -89 °C

Initial boiling point and boiling : 180 °F / 82 °C

range

Flash point 54 °F / 12 °C

Evaporation rate No data available

Not applicable Flammability (solid, gas)

Flammability (liquids) Ignitable (see flash point)

Upper explosion limit / Upper

flammability limit

12.0 %(V)

Lower explosion limit / Lower :

flammability limit

2.0 %(V)

Vapor pressure 44 hPa (68 °F / 20 °C)

Relative vapor density 2.07

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

(Air = 1.0)

Relative density : 0.96 (72 °F / 22 °C)

Solubility(ies)

Water solubility : partly soluble

Partition coefficient: n-

octanol/water

Not applicable

Autoignition temperature : 750 °F / 399 °C

Decomposition temperature : 572 °F / 300 °C

Viscosity

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle characteristics

Particle size : Not applicable

## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

Highly flammable liquid and vapor.

Vapors may form explosive mixture with air. Can react with strong oxidizing agents.

Hazardous decomposition products will be formed at elevated

temperatures.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

## **Hazardous decomposition products**

Thermal decomposition : Hydrogen fluoride

Carbonyl difluoride Carbon dioxide Carbon monoxide

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

### Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

#### **Acute toxicity**

Not classified based on available information.

#### **Components:**

#### Propan-2-ol:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 25 mg/l

Exposure time: 6 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

#### Skin corrosion/irritation

Not classified based on available information.

#### Components:

## Propan-2-ol:

Species : Rabbit

Result : No skin irritation

### Serious eye damage/eye irritation

Causes serious eye irritation.

#### **Components:**

#### Propan-2-ol:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

### Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

## Respiratory sensitization

Not classified based on available information.

## **Components:**

## Propan-2-ol:

Test Type : Buehler Test Routes of exposure : Skin contact

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

Species : Guinea pig

Method : OECD Test Guideline 406

Result : negative

### Germ cell mutagenicity

Not classified based on available information.

#### **Components:**

#### Propan-2-ol:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Intraperitoneal injection

Result: negative

### Carcinogenicity

Not classified based on available information.

#### **Components:**

### Propan-2-ol:

Species : Rat

Application Route : inhalation (vapor)
Exposure time : 104 weeks

Method : OECD Test Guideline 451

Result : negative

IARC No ingredient of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

## Reproductive toxicity

Not classified based on available information.

### **Components:**

## Propan-2-ol:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion

Result: negative

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version **Revision Date:** SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

Effects on fetal development: Test Type: Embryo-fetal development

Species: Rat

Application Route: Ingestion

Result: negative

### STOT-single exposure

May cause drowsiness or dizziness.

#### **Components:**

## Propan-2-ol:

Assessment May cause drowsiness or dizziness.

#### STOT-repeated exposure

Not classified based on available information.

### Repeated dose toxicity

## **Components:**

### Propan-2-ol:

Species Rat NOAEL : 12.5 mg/l

Application Route : inhalation (vapor) Exposure time 104 Weeks

## **Aspiration toxicity**

Not classified based on available information.

## **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

#### **Components:**

#### Propan-2-ol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 9,640 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 24 h

Toxicity to microorganisms : EC50 (Pseudomonas putida): > 1,050 mg/l

Exposure time: 16 h

### Persistence and degradability

### **Components:**

Propan-2-ol:

Biodegradability Result: rapidly degradable

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

BOD/COD : BOD: 1,19 (BOD5)

COD: 2,23 BOD/COD: 53 %

### Bioaccumulative potential

#### **Components:**

Propan-2-ol:

Partition coefficient: n-

octanol/water

: log Pow: 0.05

### Mobility in soil

No data available

#### Other adverse effects

No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

#### **Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.

Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

Empty containers retain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death. If not otherwise specified: Dispose of as unused product.

## **SECTION 14. TRANSPORT INFORMATION**

## International Regulations

**UNRTDG** 

UN number : UN 1219

Proper shipping name : ISOPROPANOL SOLUTION

Class : 3
Packing group : II
Labels : 3
Environmentally hazardous : no

IATA-DGR

UN/ID No. : UN 1219

Proper shipping name : Isopropanol solution

Class : 3 Packing group : II

Labels : Flammable Liquids

Packing instruction (cargo : 364

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

aircraft)

Packing instruction (passen: 353

ger aircraft)

**IMDG-Code** 

UN number : UN 1219

Proper shipping name : ISOPROPANOL SOLUTION

Class : 3
Packing group : II
Labels : 3
EmS Code : F-E, S-D
Marine pollutant : no

#### Transport in bulk according to IMO instruments

Not applicable for product as supplied.

## **Domestic regulation**

**49 CFR** 

UN/ID/NA number : UN 1219

Proper shipping name : Isopropanol SOLUTION

Class : 3 Packing group : II

Labels : FLAMMABLE LIQUID

ERG Code : 129 Marine pollutant : no

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **SECTION 15. REGULATORY INFORMATION**

#### **CERCLA Reportable Quantity**

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

## SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

SARA 313 : The following components are subject to reporting levels es-

tablished by SARA Title III, Section 313:

Propan-2-ol 67-63-0 >= 70 - < 90 %

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

Volatile organic compounds

(VOC) content VOC content: 662.25 g/l

Remarks: less exempt

VOC content: 662.25 g/l Remarks: as packaged

**US State Regulations** 

Pennsylvania Right To Know

Propan-2-ol 67-63-0
Fluoropolymer Trade secret
Fluoropolymer Trade secret

California Prop. 65

WARNING: This product can expose you to chemicals including 2,2'-Iminodiethanol, which is/are known to the State of California to cause cancer, and

Carbon monoxide, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

**California List of Hazardous Substances** 

Propan-2-ol 67-63-0

**California Permissible Exposure Limits for Chemical Contaminants** 

Propan-2-ol 67-63-0

International Regulations

Montreal Protocol : 1,1,1,2,2,3,4,5,5,5-

Decafluoropentane

## **SECTION 16. OTHER INFORMATION**

## **Further information**

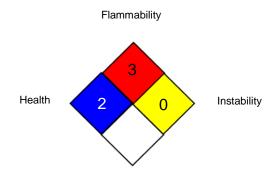
according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

#### NFPA 704:



Special hazard

#### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Chemours™ and the Chemours Logo are trademarks of The Chemours Company. Before use read Chemours safety information.

For further information contact the local Chemours office or nominated distributors.

#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

OSHA Z-2 : USA. Occupational Exposure Limits (OSHA) - Table Z-2

ACGIH / TWA : 8-hour, time-weighted average ACGIH / STEL : Short-term exposure limit

ACGIH / C : Ceiling limit

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded

at any time during a workday

NIOSH REL / C : Ceiling value not be exceeded at any time.

OSHA Z-1 / TWA : 8-hour time weighted average OSHA Z-2 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals

according to the OSHA Hazard Communication Standard



## DryFilm RA/IPA

Version Revision Date: SDS Number: Date of last issue: 10/09/2024 8.0 06/18/2025 1328695-00052 Date of first issue: 02/27/2017

in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance: PICCS - Philippines Inventory of Chemicals and Chemical Substances: (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety

Data Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

Revision Date : 06/18/2025

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8

#### **Chemours Confidential Business Information**



The Chemours Company FC, LLC 1007 Market Street Wilmington, DE 19801 United States of America (USA)

Ref:	13000001461
Revision date:	10/30/2025
Version	1.5

# **TRI Supplier Notification for Chemicals of Special Concern**

Product name: **DryFilm RA/IPA** 

This letter is to inform you that the product listed above contains the following Chemical(s) of Special Concern (CSC), which are subject to section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). CSC are a subpart listing of chemicals and compounds subject to the Supplier Notification Requirements in 40 C.F.R. 372.45. The chemical(s) listed below are in compliance with TSCA and may not be intentionally present in the product; however, it is possible that these chemical(s) may be present as an impurity and the exact concentration may vary between batches.

Chemical name	CAS No.	Value	Unit	Test Method
3,3,4,4,5,5,6,6,7,7,8,8,8-	27619-97-2	< 889	PPB	Chemours Extraction SOP*
Tridecafluorooctanesulphonic acid				
Perfluorooctanoic acid	335-67-1	< 25	PPB	Chemours Extraction SOP*
Perfluorodecanoic acid	335-76-2	< 15	PPB	Chemours Extraction SOP*
Perfluorododecanoic acid	307-55-1	< 14	PPB	Chemours Extraction SOP*
Perfluorononanoic acid	375-95-1	< 12	PPB	Chemours Extraction SOP*
Perfluorohexanoic acid	307-24-4	< 9	PPB	Chemours Extraction SOP*
Perfluorobutanoic acid	375-22-4	< 6	PPB	Chemours Extraction SOP*

<sup>\*</sup>Chemours SOP for Extraction of Residuals from Fluoropolymer Matrices. <a href="https://www.chemours.com/en/-/media/files/corporate/sop-residual-extractions-from-fluoropolymer-matrices.pdf">https://www.chemours.com/en/-/media/files/corporate/sop-residual-extractions-from-fluoropolymer-matrices.pdf</a>

The data above is based on the best readily available information as of the date of this letter, which may include representative samples of products. This information is supplemental to safety and regulatory information provided on the SDS. The content of this letter is confidential and intended for the recipient to use for regulatory purposes only.

Please note that if you repackage or otherwise redistribute this product to certain industrial customers as per 40 CFR 372.45(a)(3)(ii), a notice similar to this one should be sent to those customers.

#### Disclaimer:

This information is given in good faith and is based on data we believe to be reliable on our current level of knowledge as of the date of this response. The information applies only to the specific material designated herein as sold by Chemours and does not apply to use in any process or in combination with any other material. Since conditions of use and applications of above-mentioned products are outside Chemours' control, Chemours makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Please note that we do not routinely analyze our products for non-intentionally added substances, unless required for regulatory compliance purposes.

Chemours™ and the Chemours Logo are trademarks of The Chemours Company.

#### **Chemours Confidential Business Information**



The Chemours Company FC, LLC 1007 Market Street Wilmington, DE 19801 United States of America (USA)

If you have any questions or concerns, please reach out to your account manager.

#### Disclaimer:

This information is given in good faith and is based on data we believe to be reliable on our current level of knowledge as of the date of this response. The information applies only to the specific material designated herein as sold by Chemours and does not apply to use in any process or in combination with any other material. Since conditions of use and applications of above-mentioned products are outside Chemours' control, Chemours makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Please note that we do not routinely analyze our products for non-intentionally added substances, unless required for regulatory compliance purposes.

Chemours™ and the Chemours Logo are trademarks of The Chemours Company.