



SAFETY DATA SHEET (SDS)

Prepared in accordance with the Globally Harmonized System (GHS) and Regulation (EC) No. 1907/2006 (REACH, as amended)

INDOFLOR® CRYST.

SECTION 1 – IDENTIFICATION

1.1 Product Identification

Parameter	Details
Product Name	Indoflor® Cryst.
Manufacturer	Symrise
Symrise Product No.	660173
CAS Number	18096-62-3
EC Number	241-997-4
REACH Registration	01-2120760170-66
Chemical Name	4,4a,5,9b-Tetrahydroindeno[1,2-d][1,3]dioxine
Alternative Name	Tetrahydroindenodioxin
Molecular Formula	C ₁₁ H ₁₂ O ₂
Molecular Weight	176.2 g/mol
Chemical Class	Acetal
Product Type	Synthetic Fragrance Ingredient
Physical Form	Crystals / agglutinant powder
Olfactive Family	Animalic / Floral

1.2 Recommended Use

Professional fragrance ingredient for:

- Fine fragrance
- White-floral accords
- Jasmine accords
- Tuberose accords
- Narcotic floral compositions
- Animalic accords
- Leather compositions
- Civet effects
- Indolic accords
- Soap
- Shampoo
- Body lotion
- Detergent and household fragrance



Symrise Recommended Use

Traces up to 1% in the fragrance composition.

This is perfumery guidance, not automatically an IFRA maximum.

1.3 Supplier

Aromology Trading LLC

G05 Al Ghazal Building

Nadd Al Hamar

Dubai, United Arab Emirates

Website: www.aromology.com

Email: info@aromology.com

Telephone: +971 505197601

SECTION 2 – HAZARDS IDENTIFICATION

2.1 Classification

Public SDS documents for CAS 18096-62-3 are not fully consistent.

An SDS specifically issued for Indoflor® Crystals classifies the material under US GHS as:

- Acute Toxicity Oral – Category 5
- Acute Toxicity Dermal – Category 5

Signal Word

WARNING

Hazard Statement

May be harmful if swallowed or in contact with skin.

The same SDS does not classify the product for physical or environmental hazards.

Other current European SDS sources for CAS 18096-62-3 report:

Reproductive Toxicity Category 2 – H361: Suspected of damaging fertility or the unborn child.

Because this classification is not consistently reported across available SDS documents, the current regional Symrise SDS for Product 660173 must be consulted before assigning H361 to the commercial Symrise product.

2.2 Other Hazards

Solid material may form combustible dust concentrations in air.



Avoid:

- Breathing dust
- Eye contact
- Prolonged skin contact
- Ingestion
- Uncontrolled dust generation

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Specification
4,4a,5,9b-Tetrahydroindeno[1,2-d][1,3]dioxine	18096-62-3	Minimum 99% GC

Chemical Identity

Molecular Formula: $C_{11}H_{12}O_2$
Molecular Weight: 176.2 g/mol
Chemical Class: Acetal

Additives

Parameter	Status
Stabilizer	None
Carrier / Diluent	None
Occurrence in Nature	No

SECTION 4 – FIRST-AID MEASURES

Inhalation

Move affected person to fresh air.

If breathing is difficult:

- Keep person at rest.
- Provide fresh air.
- Obtain medical advice if symptoms persist.

Skin Contact

- Remove contaminated clothing.
- Wash skin thoroughly with soap and water.
- Obtain medical advice if irritation develops.



Eye Contact

- Rinse cautiously with clean water for several minutes.
- Remove contact lenses where easy to do.
- Continue rinsing.
- Obtain medical advice if irritation persists.

Ingestion

- Rinse mouth.
- Do not induce vomiting unless advised by medical personnel.
- Contact a physician or poison centre if unwell.

SECTION 5 – FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use:

- Water spray
- Alcohol-resistant foam
- Dry chemical powder
- Carbon dioxide

Fire Characteristics

Flash Point: >100 °C

Indoflor is not considered a readily flammable liquid.

However:

Finely divided crystalline dust may form combustible dust concentrations in air.

Hazardous Combustion Products

May include:

- Carbon monoxide
- Carbon dioxide
- Irritating organic vapours
- Smoke

Firefighter Protection

Use self-contained breathing apparatus and appropriate protective clothing where required.

SECTION 6 – ACCIDENTAL RELEASE MEASURES



Personal Precautions

- Avoid generating dust.
- Ensure adequate ventilation.
- Wear gloves.
- Wear eye protection.
- Avoid breathing dust.

Environmental Precautions

Prevent uncontrolled entry into:

- Drains
- Surface waters
- Groundwater
- Soil

Cleanup

For crystals/powder:

- Sweep or vacuum carefully without creating airborne dust.
- Place into suitable labelled containers.
- Clean remaining residue.
- Dispose according to applicable regulations.

SECTION 7 — HANDLING AND STORAGE

Handling

- Avoid dust generation.
- Use good industrial hygiene.
- Avoid skin and eye contact.
- Do not eat, drink or smoke while handling.
- Wash hands thoroughly after use.
- Use suitable ventilation.

Storage

Store:

- In original tightly closed container
- Cool and dry
- Protected from direct sunlight
- Away from excessive heat



- Away from incompatible materials
- Away from food and beverages

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

No substance-specific occupational exposure limit was identified in the reviewed documentation.

Engineering Controls

Use adequate general or local exhaust ventilation where dust can be generated.

Personal Protective Equipment

Protection	Recommendation
Eyes	Safety glasses / chemical goggles
Hands	Chemical-resistant gloves
Skin	Protective work clothing
Respiratory	Suitable particulate respirator where dust control is inadequate

Maintain good industrial hygiene.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Official Symrise Product Data

Property	Value
Appearance	Pale white to white crystals or agglutinant powder
Odour	Animalic, floral, civet, leather
GC Purity	Minimum 99%
Molecular Formula	$C_{11}H_{12}O_2$
Molecular Weight	176.2 g/mol
Flash Point	>100 °C
Boiling Point	264.4 °C
Log P (Kow)	1.84
Stabilizer	No
Occurrence in Nature	No
Chemical Class	Acetal

SECTION 10 – STABILITY AND REACTIVITY

Stability



Stable under normal recommended storage and handling conditions.

Conditions to Avoid

Avoid:

- Excessive heat
- Dust accumulation
- Ignition sources where airborne dust is present
- Strong incompatible chemicals

Incompatible Materials

Strong oxidising agents.

Hazardous Decomposition

Thermal decomposition or combustion may produce:

- Carbon monoxide
- Carbon dioxide
- Irritating organic vapours

Hazardous polymerisation is not expected.

SECTION 11 – TOXICOLOGICAL INFORMATION

Available safety information indicates relatively low acute toxicity.

Representative Acute Toxicity

Oral LD₅₀, rat: >2,000 mg/kg

A US SDS for Indoflor Crystals places oral and dermal acute toxicity in Category 5.

Skin

Avoid prolonged contact.

Eyes

Dust or direct contact may cause mechanical or transient irritation.

Inhalation

Avoid inhalation of airborne crystalline dust.

Sensitisation

The published RIFM fragrance ingredient safety assessment should be consulted for detailed toxicological evaluation.

Reproductive Toxicity

Some current European SDS databases classify CAS 18096-62-3 as:



Reproductive Toxicity Category 2 — H361

while other Indoflor-specific SDS documentation does not.

Therefore, the latest original regional Symrise SDS must be used for definitive classification.

SECTION 12 — ECOLOGICAL INFORMATION

No definitive environmental classification should be assigned from this supplier template alone.

Log P

1.84

This indicates relatively modest lipophilicity compared with many fragrance materials.

Environmental Precautions

Avoid unnecessary release to:

- Soil
- Drains
- Surface waters
- Groundwater

No environmental hazard classification was assigned in the reviewed US Indoflor Crystals SDS.

SECTION 13 — DISPOSAL CONSIDERATIONS

Dispose through an authorised waste-management facility.

Do not discharge concentrated material into drains.

Contaminated packaging should be disposed of according to applicable regulations.

Observe all local and national waste requirements.

SECTION 14 — TRANSPORT INFORMATION

The reviewed Indoflor Crystals SDS does not classify the material as dangerous goods for routine transport.

However, final transport status must be checked against:

- Current Symrise regional SDS
 - Shipment quantity
 - Package type
 - Destination
 - Air / sea / road transport rules
-

SECTION 15 — REGULATORY INFORMATION



Applicable regulatory frameworks include:

- REACH Regulation (EC) No. 1907/2006
- CLP Regulation (EC) No. 1272/2008
- Regulation (EU) 2020/878
- Cosmetics Regulation (EC) No. 1223/2009
- Regulation (EU) 2023/1545
- Current IFRA Standards
- Applicable national chemical legislation

REACH Registration
01-2120760170-66

SECTION 16 – OTHER INFORMATION

Olfactive Profile

Symrise describes Indoflor® Cryst. as:

- Animalic
- Floral
- Civet
- Leather

It is particularly useful as:
A KEY COMPONENT FOR WHITE-FLOWER NOTES

and provides an alternative to:

- Skatole
- Indole

with reduced discoloration potential.

Recommended Use

Traces up to 1%

In fragrance compositions.

DOCUMENT CONTROL

Parameter	Details
Product	Indoflor® Cryst. – Symrise
Product No.	660173
CAS No.	18096-62-3
Prepared By	Quality Assurance Department
Approved By	Abdul Wasay
Designation	Independent Perfumer



DISCLAIMER

This supplier-style SDS has been prepared from official Symrise technical information and publicly available SDS information for CAS 18096-62-3.

It is not an original Symrise-issued Safety Data Sheet.

Public SDS sources currently differ concerning the reproductive-toxicity classification of CAS 18096-62-3. The current original Symrise regional SDS for Product No. 660173 must therefore be used for definitive CLP/GHS labelling, occupational-safety and transport decisions.

Authorised by:

Fozia Khot
Director