

Safety Data Sheet

#10648199 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
2-Chloro-3,5-dinitrobenzotrifluoride	392-95-0	C7H2ClF3N2O4	10	20 Aug 2026

SECTION 1

Identification

Product name	2-Chloro-3,5-dinitrobenzotrifluoride
CAS number	392-95-0
Chemical formula	C7H2ClF3N2O4
Molecular weight	270.55
SMILES	<chem>C1=C(C=C(C(=C1C(F)(F)F)Cl)[N+](=O)[O-])[N+](=O)[O-]</chem>
EC / EINECS number	206-883-0
Recommended use & restrictions	For research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human or veterinary purposes.
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

**DANGER**

CODE	HAZARD STATEMENT
H302	Harmful if swallowed
H310	Fatal in contact with skin
H314 (sub cat. 1B)	Causes severe skin burns and eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H410	Very toxic to aquatic life with long lasting effects
CODE	PRECAUTIONARY STATEMENT
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P303+361	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse with water/shower
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+351+338	IF IN EYES: Rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
P308+313	IF exposed or concerned: Get medical advice/attention
P310	Immediately call a POISON CENTER or doctor/physician
Other hazards (e.g. PBT / vPvB, not classified)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII; This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3

Composition / information on ingredients

Purity / concentration	~100%
Impurities / stabilising additives	<i>Not applicable</i>

SECTION 4

First-aid measures

Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing; give oxygen or artificial respiration if necessary; if experiencing respiratory symptoms, get medical advice/attention.
Skin contact	Get immediate medical attention. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Eye contact	Get immediate medical attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area.
Ingestion	Rinse mouth; do NOT induce vomiting; get medical advice/attention.
Symptoms / effects & medical attention	Treat symptomatically

SECTION 5

Fire-fighting measures

Suitable extinguishing media	Foam, Dry powder, Carbon dioxide, Water spray, Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.
Special hazards	Carbon oxides, Nitrogen oxides, Hydrogen bromide gas.
Advice for firefighters	Use water spray or fog for cooling exposed containers; use extinguishing agent suitable for surrounding fire; do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6

Accidental release measures

Personal precautions & PPE	Wear recommended personal protective equipment; evacuate unnecessary personnel; avoid contact with skin, eyes and clothing; do not breathe dust; do not touch or walk on the spilled product. For personal protection see section 8.
Environmental precautions	Prevent entry to sewers and public waters; notify authorities if liquid enters sewers or public waters.
Containment & clean-up methods	On land, sweep or shovel into suitable containers; minimise generation of dust; store away from other materials.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature Ambient

Precautions for safe handling Provide local exhaust or general room ventilation; avoid creating or spreading dust; wash hands after handling; do not eat, drink or smoke when using this product.

Conditions for safe storage (incompatibilities) Keep only in the original container in a cool, well ventilated place away from direct sunlight and heat sources; keep container tightly closed; incompatible with strong oxidisers.

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data *Not applicable*

Eye / face protection Face shield
Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

Skin / hand protection Recommended gloves (splash contact): Viton rubber (fluorinated rubber).

Respiratory protection Dust mask (FFP2/FFP3)
Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

SECTION 9

Physical & chemical properties

Density (g/mL)	1 g/mL DERIVED FROM: LITERATURE
Flash point	<i>Not applicable</i>
Acidity	<i>Not applicable</i>
Appearance / physical state	Crystalline solid DERIVED FROM: LITERATURE
Colour	Colourless. DERIVED FROM: LITERATURE
Odour	Characteristic DERIVED FROM: LITERATURE
Melting / freezing point	61 - 64 °C DERIVED FROM: LITERATURE
Boiling point	285°C at 760 mmHg DERIVED FROM: LITERATURE
Solubility (water)	Insoluble in water. Soluble in chloroform and methanol. DERIVED FROM: LITERATURE
pH	<i>Not applicable</i>
Vapour pressure	<i>Not applicable</i>
Partition coefficient (log Pow)	<i>Not applicable</i>
Auto-ignition / decomposition temp	<i>Not applicable</i>

SECTION 10

Stability & reactivity

Chemical stability / reactivity	Stable under normal conditions.
Conditions to avoid	Direct sunlight, heat sources, sources of ignition.
Incompatible materials	Strong oxidisers.
Hazardous decomposition products	Toxic fumes. See section 5

SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50)	<i>No data available</i>
Skin corrosion / irritation	Causes skin irritation.
Eye corrosion / irritation	Causes serious eye irritation.
Respiratory / skin sensitisation	<i>No data available</i>
Carcinogenicity	<i>No data available</i>
Mutagenicity	<i>No data available</i>
Reproductive toxicity	<i>No data available</i>
STOT (single / repeated exposure)	May cause respiratory irritation.
Aspiration hazard	<i>No data available</i>
Endocrine disruptors	This product does not contain any known or suspected Endocrine disruptors.

SECTION 12

Ecological information

Aquatic toxicity	<i>Not applicable</i>
Persistence & degradability	<i>Not applicable</i>
Bioaccumulative potential	LOW (LogKOW = 3.2359)
Mobility in soil	LOW (KOC = 2650)
PBT / vPvB assessment	<i>Not applicable</i>

SECTION 13

Disposal considerations

Waste treatment / disposal methods	Dispose of contents/container in accordance with local/regional/national/international regulations.
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SECTION 14

Transport information

UN number	UN2923
Proper shipping name	CORROSIVE SOLID, TOXIC, N.O.S
Class	8
Packing group	II
Transport category	3
Tunnel code	(E)
Packing instruction (ADR)	P002
Packing instruction (IMDG)	P002
Environmental hazards	<i>Not applicable</i>
Special precautions for user	<i>Not applicable</i>



SECTION 15

Regulatory information

REACH code	Y110
UFI code	<i>Not applicable</i>
ECHA notification	<i>Not applicable</i>
Chemical safety assessment carried out?	Not required

SECTION 16

Other information

Revision notes / other information	This SDS replaces version 1: 2/19/2019
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