Safety Data Sheet
AldoPrime TPO
Safety Data Sheet dated: 11/22/2024 - version 1.1
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1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name:AldoPrime TPO

Recommended use of the chemical and restrictions on use

Recommended use: Primer

Restrictions on use: Not available

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party Company:

Inland Coatings
1320 Litton Drive
Salisbury, North Carolina 28147
704-932-3054

Emergency 24 hour numbers:

Emergency Number : (800) 424-9300 (CHEMTREC)

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

Flammable Liquids — Category 3	Flammable liquid and vapour.
Skin Sensitization, Category 1	May cause an allergic skin reaction.
Carcinogenicity, Category 2	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
Acute aquatic hazard, category 2	Toxic to aquatic life
Chronic (long term) aquatic hazard, category 2	Toxic to aquatic life with long lasting effects.

Label elements

Pictograms and Signal Words

Warning

Hazard statements

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing mist/vapours/spray.

P272	Contaminated work clothing must not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see supplementary instructions on this label)
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire, use a dry powder fire extinguisher to extinguish.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Not Relevant

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Qty	Name	Ident. Numb.	Classification	Registration Number
75-100 %	4-chloro-a,a,a-trifluorotoluene	CAS:98-56-6 EC:202-681-1	Flam. Liq. 3, H226; Carc. 2, H351; Aquatic Acute 2, H401; Aquatic Chronic 2, H411; Skin Sens. 1, H317	N.A.
5-10 %	xylenes; 1,2 dimethylbenzene	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315	
2.5-5 %	tetraethyl orthosilicate; tetraethyl silicate	CAS:78-10-4 EC:201-083-8 Index:014-005-00-0	Flam. Liq. 3, H226; Acute Tox. 4, H332; Eye Irrit. 2A, H319; STOT SE 3, H335	
2.5-5 %	titanium acetylacetonate; Titanium diisopropoxide bis(2,4-pentanedionate)	CAS:17927-72-9 EC:241-866-1	Eye Irrit. 2A, H319	
1-2.5 %	ethyl benzene; aethylbenzol	CAS:100-41-4 EC:202-849-4 Index:601-023-00-4	Flam. Liq. 2, H225; Acute Tox. 4, H332; Asp. Tox. 1, H304	
1-2.5 %	isopropyl alcohol; Isopropanol	CAS:67-63-0 EC:200-661-7 Index:603-117-00-0	Flam. Liq. 2, H225; Eye Irrit. 2A, H319; STOT SE 3, H336	N.A.

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Obtain medical attention if skin related symptoms persist.

Remove contaminated clothing immediately and dispose of safely.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

Not available

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

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5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: Not available

Explosive properties: Not Relevant

Oxidizing properties: Not Relevant

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

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7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Store above freezing

Always keep in a well ventilated place.

Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

Store in a well-ventilated place. Keep cool.

Avoid direct exposure to sunlight.

Opened containers must be carefully resealed and kept upright to prevent leakage.

Flammable mixtures may accumulate within the headspace of containers at room temperature.

Storage at higher temperatures requires an appropriate evaluation of preventive and protection measures to be adopted.

Storage temperature must be defined on the basis of a proper risk evaluation. Refer to other sections for additional information.

Avoid accumulating electrostatic charge.

Keep away from food, drink and feed.

Electrical installations / working materials must comply with the technological safety standards.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.
Safety electric system.

Storage temperature: Not available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
4-chloro-a,a,a-trifluorotoluene CAS: 98-56-6	MAK	GERMANY	Long Term: 1 mg/m3
	OSHA		Long Term: 2.5 mg/m3
	ACGIH		Long Term: 2.5 mg/m3 "A4 - Not Classifiable as a Human Carcinogen" As Fluorides [RR-02792-9];"bone damage;fluorosis" As Fluorides [RR-02792-9]
xylenes; 1,2 dimethylbenzene CAS: 1330-20-7	OSHA		Long Term: 435 mg/m3 - 100 ppm
	ACGIH		Long Term: 100 ppm; Short Term: 150 ppm A4 - Not Classifiable as a Human Carcinogen;CNS impairment;eye and upper respiratory tract irritation;
	EU		Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Behaviour Indicative Possibility of significant uptake through the skin;
	MAK	GERMANY	Long Term: 220 mg/m3 - 50 ppm
	ACGIH		Long Term: 100 ppm; Short Term: 150 ppm A4 - Not Classifiable as a Human Carcinogen;CNS impairment;eye and upper respiratory tract irritation
	MAK	AUSTRIA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm
	MAK	SWITZERLAND	Long Term: 435 mg/m3 - 100 ppm
	EU		Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Behaviour Indicative Possibility of significant uptake through the skin (pure)
tetraethyl orthosilicate; tetraethyl silicate CAS: 78-10-4	MAK	GERMANY	Long Term: 86 mg/m3 - 10 ppm
	OSHA		Long Term: 850 mg/m3 - 100 ppm
	ACGIH		Long Term: 10 ppm eye and upper respiratory tract irritation;kidney damage
	MAK	AUSTRIA	Long Term: 44 mg/m3 - 5 ppm; Short Term: 88 mg/m3 - 10 ppm
	MAK	SWITZERLAND	Long Term: 85 mg/m3 - 10 ppm
ethyl benzene; aethylbenzol CAS: 100-41-4	OSHA		Long Term: 435 mg/m3 - 100 ppm
	ACGIH		Long Term: 20 ppm A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans;upper respiratory tract irritation;kidney damage (nephropathy);cochlear impairment;
	EU		Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Behaviour Indicative

			Possibility of significant uptake through the skin;
	MAK	GERMANY	Long Term: 88 mg/m3 - 20 ppm
	ACGIH		Long Term: 20 ppm A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans;upper respiratory tract irritation;kidney damage (nephropathy);cochlear impairment
	MAK	AUSTRIA	Long Term: 440 mg/m3 - 100 ppm; Short Term: 880 mg/m3 - 200 ppm
	MAK	SWITZERLAND	Long Term: 220 mg/m3 - 50 ppm
	EU		Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Behaviour Indicative Possibility of significant uptake through the skin
isopropyl alcohol; Isopropanol CAS: 67-63-0	ACGIH		Long Term: 200 ppm; Short Term: 400 ppm A4
	OSHA		Long Term: 980 mg/m3 - 400 ppm
	ACGIH		Long Term: 200 ppm; Short Term: 400 ppm A4 - Not Classifiable as a Human Carcinogen;CNS impairment;eye and upper respiratory tract irritation;
	MAK	GERMANY	Long Term: 500 mg/m3 - 200 ppm
	ACGIH		Long Term: 200 ppm; Short Term: 400 ppm A4 - Not Classifiable as a Human Carcinogen;CNS impairment;eye and upper respiratory tract irritation
	MAK	AUSTRIA	Long Term: 500 mg/m3 - 200 ppm; Short Term: 2000 mg/m3 - 800 ppm
	MAK	SWITZERLAND	Long Term: 500 mg/m3 - 200 ppm

Biological limit values

4-chloro-a,a,a-trifluorotoluene CAS: 98-56-6	Biological Indicator: Fluoride; Sampling Period: Before turn Value: 2 mg/L; Medium: Urine Remark: Background; Not Specific
	Biological Indicator: Fluoride; Sampling Period: End of turn Value: 3 mg/L; Medium: Urine Remark: Background; Not Specific
xylenes; 1,2 dimethylbenzene CAS: 1330-20-7	Biological Indicator: Methyl uric Acid; Sampling Period: End of turn Value: 1.5 GGCREAT; Medium: Urine
ethyl benzene; aethylbenzol CAS: 100-41-4	Biological Indicator: Mandelic acid and fenilgliossalico; Sampling Period: End of turn; End of working week Value: 0.7 GGCREAT; Medium: Urine Remark: Not Specific; Semiquantitative
	Biological Indicator: Ethylbenzene; Sampling Period: Not critical Medium: Air at the end of exhalation Remark: Semiquantitative
	Biological Indicator: Mandelic acid and fenilgliossalico; Sampling Period: End of turn Value: 0.15 GGCREAT; Medium: Urine Remark: Not Specific
isopropyl alcohol; Isopropanol CAS: 67-63-0	Biological Indicator: Acetone; Sampling Period: End of turn; End of working week Value: 40 mg/L; Medium: Urine Remark: Background; Not Specific

Appropriate engineering controls: Not available

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

Use impervious gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid
Appearance and colour: liquid Orange
Odour: Like: Petroleum
Odour threshold: Not Relevant
pH: No data available
Melting point / freezing point: Not Relevant
Initial boiling point and boiling range: Not Relevant
Flash point: 49 °C (120 °F)
Evaporation rate: Not Relevant
Upper/lower flammability or explosive limits: Not Relevant
Vapour density: Not Relevant
Vapour pressure: Not Relevant
Relative density: 1.05 g/cm3
Solubility in water: immiscible
Solubility in oil: no data available
Partition coefficient (n-octanol/water): No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: 5,500.00 cPs
Explosive properties: Not Relevant
Oxidizing properties: Not Relevant
Solid/gas flammability: Not Relevant

Other information

Substance Groups relevant properties Not Relevant
Miscibility: Not Relevant
Fat Solubility: Not Relevant
Conductivity: Not Relevant

10. STABILITY AND REACTIVITY

Reactivity

No data available
It may generate dangerous reactions (See subsections below)

Chemical stability

It may generate dangerous reactions (See subsections below)

Possibility of hazardous reactions

None.

Conditions to avoid

No data available
Avoid accumulating electrostatic charge.

Incompatible materials

Data not available.
Avoid contact with combustible materials. The product could catch fire.

Hazardous decomposition products

Data not available.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified
	Based on available data, the classification criteria are not met
c) serious eye damage/irritation	Not classified

	Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	The product is classified: Skin Sensitization, Category 1(H317)
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	The product is classified: Carcinogenicity, Category 2(H351)
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

4-chloro-a,a,a-trifluorotoluene	a) acute toxicity	LD50 Oral Rat 13000 mg/kg
		LC50 Inhalation Mouse 20 mg/l
		LD50 Skin Rabbit > 2 mg/kg
		LD50 Skin Rabbit > 2 ml/kg
		LC50 Inhalation Rat = 33 mg/l 4h
		LD50 Oral Rat = 13 g/kg
		LD50 Skin Rabbit > 2 ml/kg
		LC50 Inhalation Rat = 33 mg/l 4h
		LD50 Oral Rat = 13 g/kg
		LD50 Skin Rabbit > 3300 mg/kg
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat > 45
xylenes; 1,2 dimethylbenzene	a) acute toxicity	LC50 Inhalation Rat = 47635 mg/l 4h
		LD50 Oral Rat = 4300 mg/kg
		LD50 Skin Rabbit > 4350 mg/kg
		LC50 Inhalation Rat = 29.08 mg/l 4h
		LD50 Oral Rat = 3500 mg/kg
tetraethyl orthosilicate; tetraethyl silicate	a) acute toxicity	LD50 Skin Rabbit = 5878 mg/kg
		LD50 Oral Rat = 6270 mg/kg
		LD50 Skin Rabbit = 5878 mg/kg
ethyl benzene; aethylbenzol	a) acute toxicity	LD50 Skin Rabbit = 15354 mg/kg
		LC50 Inhalation Rat = 172 mg/l 4h
		LD50 Oral Rat = 3500 mg/kg
		LD50 Skin Rabbit = 15400 mg/kg
		LC50 Inhalation Rat = 17.4 mg/l 4h
		LD50 Oral Rat = 3500 mg/kg
isopropyl alcohol; Isopropanol	a) acute toxicity	LD50 Oral Rat 5500 mg/kg
		LC50 Inhalation Rat 72.6 mg/l
		LD50 Skin Rabbit 12870 mg/kg
		LC50 Inhalation Rat = 16000 ppm 8h
		LD50 Skin Rabbit = 4059 mg/kg

	LC50 Inhalation Rat = 72600 mg/m3 4h
	LD50 Oral Rat = 1870 mg/kg
g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat 1

Substance(s) listed on the IARC Monographs:

4-chloro-a,a,a-trifluorotoluene	Group 2B
xylenes; 1,2 dimethylbenzene	Group 3
ethyl benzene; aethylbenzol	Group 2B
isopropyl alcohol; Isopropanol	Group 3

Substance(s) listed as OSHA Carcinogen(s):

4-chloro-a,a,a-trifluorotoluene

ethyl benzene; aethylbenzol

Substance(s) listed as NIOSH Carcinogen(s):

None

Substance(s) listed on the NTP report on Carcinogens:

None

12. ECOLOGICAL INFORMATION

Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

The product is classified: Acute aquatic hazard, category 2(H401), Chronic (long term) aquatic hazard, category 2(H411)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
4-chloro-a,a,a-trifluorotoluene	CAS: 98-56-6 - EINECS: 202-681-1	LC50 Fish Lepomis macrochirus = 11.4 mg/L 72h UNION CARBIDE CORP. ENVIRONMENTAL SERVICES-THE ACUTE TOXICITY OF PCBTF TO BLUEGILL SUN FISH UCES PROJECT NÂ° 11506-81-07-1979-N.Y.TARRY TOWN. - ca.11.4 ca.14.1 mg/L LOEC Fish Pimephales promelas 1.4 mg/L ,,E G & G , BIONOMICS, AQUATIC TOXICOLOGY LABORATORY-THE TOXICITY OF PCBTF TO FATHEAD MINNOW EMBRIOS AND LARVAE - REPORT B W - 81-3-838, 1981, WAREHAM IN EPA DOCUMENT NÂ° 40-8152019. NOEC Fish Pimephales promelas 0.54 mg/L ,,E G & G , BIONOMICS, AQUATIC TOXICOLOGY LABORATORY-THE TOXICITY OF PCBTF TO FATHEAD MINNOW EMBRIOS AND LARVAE - REPORT B W - 81-3-838, 1981, WAREHAM IN EPA DOCUMENT NÂ° 40-8152019. EC50 Daphnia Daphnia magna = 0.12 mg/L 4d 1/6 2/6 PRESI DA UNION CARBIDE CORP. ENVIRONMENTAL SERVICES-THE ACUTE TOXICITY OF PCBTF TO THE WATER FLEA DAPHNIA MAGNA STRAUS UCES PROJECT NÂ° 11506-81-06-1979- N.Y. TARRY TOWN IN EPA DOCUMENT NÂ° 40-7952015. 4/6 5/6 PRESI DA PECE P. - DETERMINAZI - ca.0.12 ca.0.222 mg/L EC100 Daphnia Daphnia magna 4.92 mg/L 48h EC50 Daphnia Daphnia magna = 10.7 mg/L 48h - ca.10.7 ca.14.5 mg/L a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 3.68 mg/L 48h IUCLID a) Aquatic acute toxicity : LC50 Fish Danio rerio = 3 mg/L 96h ECHA
xylenes; 1,2 dimethylbenzene	CAS: 1330-20-7 - EINECS: 215-535-7 - INDEX: 601-022-00-9	a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio = 780 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 13.4 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 2.661 mg/L 96h EPA

		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 13.5 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 13.1 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 19 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 7.711 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 23.53 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio > 780 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata 30.26 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia water flea = 3.82 mg/L 48h
		a) Aquatic acute toxicity : LC50 Daphnia Gammarus lacustris = 0.6 mg/L 48h
tetraethyl orthosilicate; tetraethyl silicate	CAS: 78-10-4 - EINECS: 201-083-8 - INDEX: 014-005-00-0	a) Aquatic acute toxicity : LC50 Fish Danio rerio > 245 mg/L 96h ECHA
ethyl benzene; aethylbenzol	CAS: 100-41-4 - EINECS: 202-849-4 - INDEX: 601-023-00-4	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 11 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 32 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata > 438 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 4.2 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 7.55 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 9.1 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 9.6 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 1.8 mg/L 48h IUCLID
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 4.6 mg/L 72h IUCLID
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 2.6 mg/L 72h EPA
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 1.7 mg/L 96h EPA
isopropyl alcohol; Isopropanol	CAS: 67-63-0 - EINECS: 200-661-7 - INDEX: 603-117-00-0	LC50 Fish Pimephales promelas 9640 mg/L 96h ,,Veith, G.D., Call, D.J. & Brooke, L.T., Estimating the Acute Toxicity of Narcotic Industrial Chemicals to Fathead Minnows. In: Bishop, W.E., Cardwell, R.D. & Heidolph, B.B. Eds. Aquatic Toxicology and Hazard Assessment: 6th Symp., ASTM STP 802, Philadelph
		LC100 Fish Leuciscus idus melanotus 9750 mg/L 48h ,,Juhnke, I. Ludemann, D.: Ergebnisse der Untersuchung von 200 chemischen Verbindungen auf akute FischtoxizitÃ¤t mit dem Goldorfentest. Z. Wasser-Abwasser-Forschung 11 (1978) 161-164. - 9750 10920 mg/L
		LC50 Fish Leuciscus idus melanotus 8970 mg/L 48h ,,Juhnke, I. Ludemann, D.: Ergebnisse der Untersuchung von 200 chemischen Verbindungen auf akute FischtoxizitÃ¤t mit dem Goldorfentest. Z. Wasser-Abwasser-Forschung 11 (1978) 161-164. - 8970 9280 mg/L
		EC0 Daphnia Daphnia magna > 10000 mg/L 24h ,,Bringmann, G. & Kuehn, R., Results of the Damaging Effect of Water Pollutants on Daphnia magna, Z. Wasser Abwasser Forsch., 10(5), 1977, 161 - 166.
		EC50 Daphnia Daphnia magna 9700 mg/L 24h ,,Bringmann, G. Kuhn, R.: Ergebnisse der Schadwirkung wassergefÃ¤hrdender Stoffe gegen Daphnia magna in einem weiterentwickelten standardisierten Testverfahren. Z.Wasser-Abwasser-Forschung 15 (1982) 1-6.
		EC100 Daphnia Daphnia magna > 10000 mg/L 24h ,,Bringmann, G. Kuhn, R.: Ergebnisse der Schadwirkung wassergefÃ¤hrdender Stoffe gegen Daphnia magna in einem weiterentwickelten standardisierten Testverfahren. Z.Wasser-Abwasser-Forschung 15 (1982) 1-6.

EC10 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) > 1000 mg/L 96h ,,Knacker, T. Lebertz, H. Klopffer, W. Zietz, E. Brodsky, J. Oppelt, B. Hilt, J. Spychala, U. Reifenberg, P. Millhoff, H. Kohl, E.G.: Experimentelle Bestimmung von Stoffdaten zur Einstufung "umweltgefÃ¤hrlich

EC90 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) > 1000 mg/L 96h ,,Knacker, T. Lebertz, H. Klopffer, W. Zietz, E. Brodsky, J. Oppelt, B. Hilt, J. Spychala, U. Reifenberg, P. Millhoff, H. Kohl, E.G.: Experimentelle Bestimmung von Stoffdaten zur Einstufung "umweltgefÃ¤hrlich

EC50 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) > 1000 mg/L 96h ,,Knacker, T. Lebertz, H. Klopffer, W. Zietz, E. Brodsky, J. Oppelt, B. Hilt, J. Spychala, U. Reifenberg, P. Millhoff, H. Kohl, E.G.: Experimentelle Bestimmung von Stoffdaten zur Einstufung "umweltgefÃ¤hrlich

LOEC Algae Scenedesmus quadricauda 1800 mg/L 7d ,,Bringmann, G. & Kuehn, R., Comparison of the Toxicity Thresholds of Water Pollutants to Bacteria, Algae and Protozoa in the Cell Multiplication Inhibition Test, Water Research, 14, 1980, 231 - 241.

a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 9640 mg/L 96h IUCLID

a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus > 1400000 µg/L 96h EPA

a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 13299 mg/L 48h IUCLID

a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus > 1000 mg/L 96h IUCLID

a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus > 1000 mg/L 72h IUCLID

a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 11130 mg/L 96h IUCLID

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

14. TRANSPORT INFORMATION

UN number

DOT-UN Number: UN1993
ADR-UN number: 1993
IATA-Un number: 1993
IMDG-Un number: 1993

UN proper shipping name

DOT-Proper Shipping Name: Flammable liquids, n.o.s. (chlorobenzotrifluoride - ethylbenzene)
ADR-Shipping Name: FLAMMABLE LIQUID, N.O.S. (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (vapour pressure at 50 °C more than 110 kPa, boiling point of more than 35 °C) (chlorobenzotrifluoride - ethylbenzene)
IATA-Technical name: FLAMMABLE LIQUID, N.O.S. (chlorobenzotrifluoride - ethylbenzene)
IMDG-Technical name: FLAMMABLE LIQUID, N.O.S. (chlorobenzotrifluoride - ethylbenzene)

Transport hazard class(es)

DOT-Hazard Class: 3
ADR-Class: 3
IATA-Class: 3
IMDG-Class: 3

Packing group

DOT-Packing group: III
ADR-Packing Group: III
IATA-Packing group: III
IMDG-Packing group: III

Environmental hazards

Marine pollutant: Yes
Environmental Pollutant: Not Applicable
DOT-RQ: Yes DOT-RQ - Quantity: 100 lbs

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not Applicable

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): B1, B52, IB3, T4, TP1, TP29
DOT-Label(s): 3
DOT-Symbol: N/A
DOT-Cargo Aircraft: N/A
DOT-Passenger Aircraft: N/A
DOT-Bulk: N/A
DOT-Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR-Label: 3
ADR-Hazard identification number: -
ADR-Transport category (Tunnel restriction code): 3 (E)

Air (IATA):

IATA-Passenger Aircraft: 355
IATA-Cargo Aircraft: 366
IATA-Label: 3
IATA-Subsidiary hazards: -
IATA-Erg: 3L
IATA-Special Provisions: A3

Sea (IMDG):

IMDG-Stowage Code: Category A
IMDG-Stowage Note: -
IMDG-Subsidiary hazards: -
IMDG-Special Provisions: 223 274 955
IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: F-E, S-E
IMDG-MFAG: N/A

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

4-chloro-a,a,a-trifluorotoluene	is listed in TSCA	Section 8b Section 8a - PAIR Section 12b
xylenes; 1,2 dimethylbenzene	is listed in TSCA	Section 8b
tetraethyl orthosilicate; tetraethyl silicate	is listed in TSCA	Section 8b Section 8a - PAIR
titanium acetylacetonate; Titanium diisopropoxide bis(2,4-pentanedionate)	is listed in TSCA	Section 8b
ethyl benzene; aethylbenzol	is listed in TSCA	Section 8b
isopropyl alcohol; Isopropanol	is listed in TSCA	Section 8b

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

No substances listed

Section 304 - Hazardous substances:

xylenes; 1,2 dimethylbenzene

ethyl benzene; aethylbenzol

Section 313 - Toxic chemical list:

xylenes; 1,2 dimethylbenzene

ethyl benzene; aethylbenzol

isopropyl alcohol; Isopropanol

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

xylenes; 1,2 dimethylbenzene	Reportable quantity:	100	pounds
ethyl benzene; aethylbenzol	Reportable quantity:	1000	pounds

CAA - Clean Air Act

CAA listed substances:

xylenes; 1,2 dimethylbenzene	is listed in CAA	Section 112(b) - HAP Section 112(b) - HON
ethyl benzene; aethylbenzol	is listed in CAA	Section 112(b) - HAP Section 112(b) - HON

CWA - Clean Water Act

CWA listed substances:

xylenes; 1,2 dimethylbenzene	is listed in CWA	Section 311
ethyl benzene; aethylbenzol	is listed in CWA	Section 307 Section 311

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

4-chloro-a,a,a-trifluorotoluene	Listed as carcinogen
ethyl benzene; aethylbenzol	Listed as carcinogen

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

xylenes; 1,2 dimethylbenzene

tetraethyl orthosilicate; tetraethyl silicate

ethyl benzene; aethylbenzol

isopropyl alcohol; Isopropanol

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

xylenes; 1,2 dimethylbenzene

tetraethyl orthosilicate; tetraethyl silicate

ethyl benzene; aethylbenzol

isopropyl alcohol; Isopropanol

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

4-chloro-a,a,a-trifluorotoluene

xylenes; 1,2 dimethylbenzene

tetraethyl orthosilicate; tetraethyl silicate

ethyl benzene; aethylbenzol

isopropyl alcohol; Isopropanol

Canada - Federal regulations

DSL - Domestic Substances List

DSL (Domestic Substances List)

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List

NDSL (Non Domestic Substances List)

No substances listed

NPRI - National Pollutant Release Inventory

NPRI (National Pollutant Release Inventory) - List of substances listed.

No substances listed

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16. OTHER INFORMATION

Safety Data Sheet dated: 5/20/2023 - version 5

Additional classification information

NFPA Health: 1 = Slight
NFPA Flammability: 2 = Combustible liquid
NFPA Reactivity: 0 = Minimal
NFPA Special Risk: N.A.

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Code	Description
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
A.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
A.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
A.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
A.2/2	Skin Irrit. 2	Skin irritation, Category 2
A.3/2A	Eye Irrit. 2A	Eye irritation, Category 2A
A.4.2/1	Skin Sens. 1	Skin Sensitization, Category 1
A.6/2	Carc. 2	Carcinogenicity, Category 2
A.8/3	STOT SE 3	Specific target organ toxicity following single exposure, Category 3
B.6/2	Flam. Liq. 2	Flammable Liquids — Category 2
B.6/3	Flam. Liq. 3	Flammable Liquids — Category 3

US-HAE/A2	Aquatic Acute 2	Acute aquatic hazard, category 2
US-HAE/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
IMDG: International Maritime Code for Dangerous Goods.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.

Paragraphs modified from the previous revision:

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 4. FIRST AID MEASURES
- 6. ACCIDENTAL RELEASE MEASURES
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION