

SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: GC DE-OX-ID

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Type: Contact Cleaner
Product Name: **GC DE-OX-ID**
Part Number(s): **19-1906-A**

Emergency Contact: **Chemtrec**
Phone: **(800) 424-9300**

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Flam. Aerosol 1; Liquefied gas; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1

Label elements

Hazard Symbol



Signal word(s)

DANGER

Hazard Statement(s)

Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
Causes skin irritation. Repeated exposure may cause skin dryness or cracking.
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.

Precautionary Statement(s)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Do not spray on an open flame or other ignition source.
Ground/bond container and receiving equipment.
Do not pierce or burn, even after use.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/eye protection.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.



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SECTION 2. HAZARDS IDENTIFICATION (CONTINUED)

Wash hands and exposed skin after use.
Obtain special instructions before use.

Other hazards

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	% wt. *	CAS No.	Hazard classification
Heptane, branched, cyclic and linear	50 - 60	426260-76-6	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Acute 2; H401 Aquatic Chronic 3; H412
Petroleum distillate	10 - 20	Trade Secret	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Acute 2; H401 Aquatic Chronic 2; H411
1,1 Difluoroethane	10 - 20	75-37-6	Flam. Gas 1; H220 Liquified Gas; H280 Simple Asphyxiant
White Mineral Oil	1 - 5	8042-47-5	Asp. Tox. 1; H304
Carbon Dioxide	< 10	124-38-9	Compressed dissolved gas; H280

* The exact percentage withheld as a trade secret in accordance with 29 CFR 1910.1200.

Additional Information Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below.

Ethylbenzene (CAS No. 100-41-4); < 0.1 %
Toluene (CAS No. 108-88-3) ,< 0.1 %
Benzene (CAS No.. 71-43-2); < 0.1 %

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SECTION 4. FIRST AID MEASURES



Description of first aid measures

Inhalation	Move person to fresh air. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention.
Skin Contact	Wash affected skin with soap and water. If irritation (redness, rash, blistering) develops, get medical attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Do not induce vomiting. Do not give anything by mouth to an unconscious person. Get immediate medical attention.
Most important symptoms and effects, both acute and delayed	May be fatal if swallowed and enters airways. Do NOT induce vomiting.
Indication of any immediate medical attention and special treatment needed	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable Extinguishing Media	Extinguish with carbon dioxide, dry chemical, foam or water spray.
-Unsuitable Extinguishing Media	Do not use water jet.

Special hazards arising from the substance or mixture

Pressurised container: May burst if heated

Advice for fire-fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.



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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Eliminate sources of ignition. Avoid contact with skin and eyes. Avoid breathing spray. Wear protective gloves/eye protection.
Environmental precautions	Prevent liquid entering sewers, basements and work pits.
Methods and material for containment and cleaning up	Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.
Reference to other sections	None
Additional Information	None

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling	Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Avoid breathing vapors.
Conditions for safe storage, including any incompatibilities	
-Storage temperature	Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.
-Incompatible materials	This product should be stored away from sources of strong heat or oxidizing chemicals.
Specific end use(s)	Electronics cleaner

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
Heptane, branched, cyclic and linear	426260-76-6	500 ppm*	1500 mg/m ³	-----	-----	*n-heptane
Alkanes and cycloalkanes, C5 - C8	-----	-----	1500 mg/m ³	-----	-----	-----
Alkanes & Cycloalkanes, C9-C15	-----	-----	1200 mg/m ³	-----	-----	-----
Carbon dioxide	124-38-9	-----	5000 ppm	-----	30,000 ppm	-----
Mineral oils / Oil Mist	-----	5 mg/m ³	5 mg/m ³	-----	-----	⁽¹⁾ Inhalable

Recommended monitoring method NIOSH 1500 (hydrocarbons, B.P. 36 - 126 °C); NIOSH 5026 (Oil mist; mineral); NIOSH 1501 (Hydrocarbons, Aromatic); NIOSH 1550 (Naphthas)

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

Exposure controls

Appropriate engineering controls

Provide adequate ventilation to ensure that the occupational exposure limit is not exceeded.

Personal protection equipment

Eye/face protection

Wear protective eyewear (goggles, face shield, or safety glasses).



Skin protection (Hand protection/ Other)

Wear suitable gloves if prolonged skin contact is likely. Check with protective equipment manufacturer's data.



Respiratory protection

Normally no personal respiratory protection is necessary. In case of insufficient ventilation, wear suitable respiratory equipment. Check with protective equipment manufacturer's data.



Thermal hazards

Not normally required. Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls

Avoid release to the environment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Aerosol spray
Color	Colourless
Odor	Slightly ethereal
Odor Threshold (ppm)	Not available
pH (Value)	Not available
Melting Point (°C) / Freezing Point (°C)	Not available.
Boiling point/boiling range (°C):	-25 (1,1-Difluoroethane)
Flash Point (°C)	-50, est. (1,1-Difluoroethane)
Evaporation Rate	>1 (Ethyl ether =1) (1,1-Difluoroethane)
Flammability (solid, gas)	Extremely flammable
Explosive Limit Ranges	3.9% - 16.9% v/v (1,1-Difluoroethane)
Vapor pressure (Pascal)	5.3×10^5 @ 21°C (1,1-Difluoroethane)
Vapor Density (Air=1)	2.4 (1,1-Difluoroethane)
Density (g/ml)	Not available.
Solubility (Water)	0.28% @ 21°C (1,1-Difluoroethane)



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)

Solubility (Other)	Not available
Partition Coefficient (n-Octanol/water)	Not available
Auto Ignition Point (°C)	440 (1,1-Difluoroethane)
Decomposition Temperature (°C)	Not available
Kinematic Viscosity (cSt)	Not available
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Other information	Not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable.
Possibility of hazardous reactions	None anticipated.
Conditions to avoid	Avoid contact with heat and ignition sources.
Incompatible materials	This product should be stored away from sources of strong heat or oxidizing chemicals.
Hazardous decomposition product(s)	Carbon monoxide, Carbon dioxide, Acrid smoke

SECTION 11. TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Information on toxicological effects

Heptane, branched, cyclic and linear (CAS# 426260-76-6) - By analogy with similar materials:

Acute toxicity	Oral: LD50 >5 g/kg-bw Dermal: LD50 >2 g/kg-bw Inhalation: LC50 = 65 - 103 mg/L (Vapour), 4-hr. rat May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.
Irritation/Corrosivity	Causes skin irritation. Repeated exposure may cause skin dryness or cracking. May cause eye irritation.
Sensitisation	It is not a skin sensitiser.
Repeated dose toxicity	NOAEC: 12350 mg/m ³ (2 yr, inhal., rat, Systemic effects) LOAEC: 1650 mg/m ³ (2 hr, inhal., rat, CNS effects) May cause drowsiness or dizziness.



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SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

Carcinogenicity No data. It is unlikely to present a carcinogenic hazard to man.

NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

Mutagenicity There is no evidence of mutagenic potential.

Toxicity for reproduction No information available

Naphtha (petroleum) hydrotreated light (CAS No. 64742-49-0) - By analogy with similar materials:

Acute toxicity (calculated / estimated) Oral: LD50 >5000 mg/kg-bw
Dermal: LD50 >2000 mg/kg-bw
Inhalation: LC0 ≥7.6 mg/l (Vapor), 4-hr. rat - May cause drowsiness or dizziness.

Irritation/Corrosivity Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

Sensitization It is not a skin sensitizer.

Repeated dose toxicity Dermal: NOEAL >2000 mg/kg bw (systemic effects)
Inhalation: NOAEC = 1.4 mg/l (Vapor)

Carcinogenicity It is unlikely to present a carcinogenic hazard to man.

NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

Mutagenicity Not to be expected

Reproductive toxicity Not to be expected.

Other information Contains: Benzene (CAS No. 71-43-2) A1: Confirmed Human Carcinogen: The agent is carcinogenic to humans based on the weight of evidence from epidemiological studies; Ethylbenzene (CAS# 100-41-4). A3 - Confirmed Animal Carcinogen (ACGIH); Toluene (CAS No. 108-88-3) Suspected of damaging the unborn child. NOAEC: 2.8 mg/liter (rat)

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Heptane, branched, cyclic and linear (CAS# 426260-76-6) - By analogy with similar materials:

Short term LL50 (96 hour): >13.4 mg/L (*Oncorhynchus mykiss*)
EL50 (48 hour): 3 mg/l (*Daphnia magna*, mobility)
EC50 (96 hour): 13 mg/l (*Pseudokirchnerella subcapitata*)

Long Term NOELR (28 days) 1.5 mg/l (*Fish*) QSAR
LOEC (21 days): 0.32 mg/l (*Daphnia magna*)
NOEL (96 hour) 6.3 mg/l (Algae)



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SECTION 12. ECOLOGICAL INFORMATION (CONTINUED)

Naphtha (petroleum) hydrotreated light (CAS No. 64742-49-0) - By analogy with similar materials:

Short term	LL50 (96 hour): 8.2 mg/L (fish) EL50 (48 hour): 4.5 mg/L (crustacea) EL50 (72 hour): 3.1 mg/L (algae)
Long Term	NOELR (21 days): 2.6 mg/L (crustacea; reproduction) NOELR (72 hour): 0.5 mg/L (algae; growth rate)
Persistence and degradability	According to OECD criteria the product is not readily biodegradable but inherently biodegradable.
Bioaccumulative potential	The product has no potential for bioaccumulation.
Mobility in soil	Not available.
Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
Other adverse effects	None known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods	Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.
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SECTION 14. TRANSPORT INFORMATION

	<u>U.S. DOT</u>	<u>Sea transport (IMDG)</u>	<u>Air transport (ICAO/IATA)</u>
UN number	1950	1950	1950
Proper Shipping Name	Aerosols, flammable	Aerosols, flammable	Aerosols, flammable
Transport hazard class(es)	2.1	2.1	2.1
Packing group	Not applicable	Not applicable	Not applicable
Environmental hazards	None assigned	None assigned	None assigned
Special precautions for user	None assigned	None assigned	None assigned

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable



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SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
None	-----	-----	-----

SARA 311/312 - Hazard Categories:

Fire Sudden Release Reactivity Immediate (acute) Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
None	-----	-----

SARA 302 - Extremely Hazardous Substances (40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
None	-----	-----	None

California Proposition 65 List:

Chemical Name	CAS No.	Type of Toxicity
Ethylbenzene *	100-41-4	Cancer
Benzene *	71-43-2	Cancer
Toluene *	108-88-3	Developmental

* Trace



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SECTION 16. OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: May 15, 2015

Hazard Statement(s) and Risk Phrases Listed in: SECTION 2:/ SECTION 3:

Hazard Statement(s)

- H220: Extremely flammable gas.
- H225: Highly flammable liquid and vapor.
- H280: Contains gas under pressure; may explode if heated.
- H302: Harmful if swallowed.
- H304: May be fatal if swallowed and enters airways.
- H315: Causes skin irritation.
- H336: May cause drowsiness or dizziness.
- H401: Toxic to aquatic life.
- H411: Toxic to aquatic life with long lasting effects.
- H412: Harmful to aquatic life with long lasting effects.

Training advice: None.

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