



# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Trade name or designation of the mixture Oxide Clean Plus

Registration number -

Synonyms None.

Product code BDS002322AE

Issue date 28-May-2021

Version number 01

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Cleaners - Precision

Uses advised against None known.

### 1.3. Details of the supplier of the safety data sheet

Company name CRC Industries Europe bv

Address Touwslagerstraat 1  
9240 Zele  
Belgium

Telephone +32(0)52/45.60.11

Fax +32(0)52/45.00.34

E-mail hse@crcind.com

Website www.crcind.com

1.4. Emergency telephone number Tel.: +32(0)52/45.60.11 (office hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Physical hazards

Aerosols Category 3 H229 - Pressurized container: May burst if heated.

##### Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard Category 4 H413 - May cause long lasting harmful effects to aquatic life.

**Hazard summary** Aerosol CONTENTS UNDER PRESSURE.  
Pressurised container may explode when exposed to heat or flame. Dangerous for the environment if discharged into watercourses. Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms None.

Signal word Warning

##### Hazard statements

H229 Pressurized container: May burst if heated.  
H413 May cause long lasting harmful effects to aquatic life.

#### Precautionary statements

##### Prevention

P102 Keep out of reach of children.  
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P251 Do not pierce or burn, even after use.

**Response** Not assigned.

## Storage

P410 + P412

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

## Disposal

P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

## Supplemental label information

EUH018 - In use, may form flammable/explosive vapour-air mixture.

9% by mass of the contents are flammable.

Regulation (EC) No 648/2004 on detergents: halogenated hydrocarbons > 30%

## 2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Reaction mass of 2-(ethoxydifluoromethyl)-1,1,1,2, <b>Classification:</b> Aquatic Chronic 4;H413	25 - 50	EC425-340-0 425-340-0	01-0000017174-74	-	
trans-dichloroethylene <b>Classification:</b> Flam. Liq. 2;H225, Acute Tox. 4;H332;(ATE: 11 mg/l), Eye Irrit. 2;H319, STOT SE 3;H336, Aquatic Chronic 3;H412	5 - 10	156-60-5 205-860-2	01-2120093504-55	602-026-00-3	C

#### List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### Composition comments

The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

#### General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 4.1. Description of first aid measures

##### Inhalation

If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.

##### Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

##### Eye contact

Rinse with water. Get medical attention if irritation develops and persists.

##### Ingestion

In the unlikely event of swallowing contact a physician or poison control centre.

#### 4.2. Most important symptoms and effects, both acute and delayed

Exposure may cause temporary irritation, redness, or discomfort.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

#### General fire hazards

Not available.

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

##### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed.

#### 5.3. Advice for firefighters

##### Special protective equipment for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

##### Special fire fighting procedures

Containers should be cooled with water to prevent vapour pressure build up.

#### Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Wear appropriate protective equipment and clothing during clean-up.

**For emergency responders** Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**6.2. Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up** Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. The product is immiscible with water and will sediment in water systems. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**6.4. Reference to other sections** For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Pressurised container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Do not re-use empty containers. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

**7.2. Conditions for safe storage, including any incompatibilities** Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store away from incompatible materials (see Section 10 of the SDS).

Storage class (TRGS 510): 2B (Aerosol dispensers and lighters)

**7.3. Specific end use(s)** Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
trans-dichloroethylene (CAS 156-60-5)	STEL	1010 mg/m <sup>3</sup>
		250 ppm
	TWA	806 mg/m <sup>3</sup> 200 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

#### Derived no effect levels (DNELs)

##### General Population

Components	Value	Assessment factor	Notes
trans-dichloroethylene (CAS 156-60-5)			
Long-term, Systemic, Inhalation	198 mg/m <sup>3</sup>	20	Repeated dose toxicity
Long-term, Systemic, Oral	57 mg/kg bw/day	80	Repeated dose toxicity

##### Workers

Components	Value	Assessment factor	Notes
Reaction mass of 2-(ethoxydifluoromethyl)-1,1,1,2, (CAS EC425-340-0)			
Long-term, Systemic, Inhalation	1764 mg/m <sup>3</sup>		
trans-dichloroethylene (CAS 156-60-5)			
Long-term, Systemic, Inhalation	797 mg/m <sup>3</sup>	10	Repeated dose toxicity

## Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
Reaction mass of 2-(ethoxydifluoromethyl)-1,1,1,2, (CAS EC425-340-0)			
Freshwater	0.00237 mg/l		
Sediment (freshwater)	0.0393 mg/kg bw/day		
Soil	0.0041 mg/kg		
trans-dichloroethylene (CAS 156-60-5)			
Freshwater	36.4 µg/l	1000	
Sediment (freshwater)	548.3 µg/kg		
Soil	56.3 µg/kg		
STP	17 mg/l	100	

## 8.2. Exposure controls

**Appropriate engineering controls** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Individual protection measures, such as personal protective equipment

<b>General information</b>	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles). Use eye protection conforming to EN 166.
<b>Skin protection</b>	
- <b>Hand protection</b>	For accidental contact the use of disposable gloves should be sufficient provided they are changed immediately after a splash or spill may occur. If intentional contact is expected reusable gloves should be used with a breakthrough time greater than the total duration of the product use. Wear suitable gloves tested to EN374. Nitrile gloves are recommended. Suitable gloves can be recommended by the glove supplier.
- <b>Other</b>	Not available.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment. Chemical respirator with organic vapour cartridge. (Filter type AX)
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures** When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls** Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Physical state</b>	Liquid.
<b>Form</b>	Aerosol
<b>Colour</b>	Red.
<b>Odour</b>	Characteristic odor.
<b>Melting point/freezing point</b>	-49.8 °C (-57.6 °F) estimated
<b>Boiling point or initial boiling point and boiling range</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	9.7 % estimated
<b>Flammability limit - upper (%)</b>	12.8 % estimated
<b>Flash point</b>	None
<b>Auto-ignition temperature</b>	> 200 °C (> 392 °F)
<b>Decomposition temperature</b>	Not available.
<b>pH</b>	Not applicable.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble in water

Vapour pressure	4200 hPa estimated
Vapour density	Not available.
Relative density	1.34 g/cm <sup>3</sup>
Relative density temperature	20 °C (68 °F)
Particle characteristics	Not available.

## 9.2 Other safety characteristics

### Aerosol spray enclosed space

Time equivalent > 300 s/m<sup>3</sup>

Aerosol spray ignition distance < 15 cm

Chemical family Cleaner

Explosive properties Not explosive.

Heat of combustion (NFPA 30B) 0.15 kJ/g estimated

Oxidising properties Not oxidising.

VOC 1340 g/l

## SECTION 10: Stability and reactivity

**10.1. Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

**10.2. Chemical stability** Material is stable under normal conditions.

**10.3. Possibility of hazardous reactions** No dangerous reaction known under conditions of normal use.

**10.4. Conditions to avoid** Avoid high temperatures.

**10.5. Incompatible materials** Strong oxidising agents.

**10.6. Hazardous decomposition products** Carbon oxides.

## SECTION 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### Information on likely routes of exposure

**Inhalation** Prolonged inhalation may be harmful.

**Skin contact** Based on available data, the classification criteria are not met.

**Eye contact** Based on available data, the classification criteria are not met.

**Ingestion** May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

**Symptoms** Exposure may cause temporary irritation, redness, or discomfort.

### 11.1. Information on toxicological effects

**Acute toxicity** Classification based on calculation method. Based on available data, the classification criteria are not met.

Product	Species	Test Results
Oxide Clean Plus		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	49505 g/kg
<b>Inhalation</b>		
LC50	Rat	272 mg/l/4h
<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Reaction mass of 2-(ethoxydifluoromethyl)-1,1,1,2,		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	2000 - 5000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 989 mg/l
<b>Oral</b>		
LD50		> 2000 mg/kg

Components	Species	Test Results
trans-dichloroethylene (CAS 156-60-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 5000 mg/kg
<b>Inhalation</b>		
LC50	Rat	95.6 mg/l/4h
<b>Oral</b>		
	Rat	7902 mg/kg
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.	
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.	
<b>Respiratory sensitisation</b>	Based on available data, the classification criteria are not met.	
<b>Skin sensitisation</b>	Based on available data, the classification criteria are not met.	
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.	
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.	
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.	
<b>Specific target organ toxicity - single exposure</b>	Based on available data, the classification criteria are not met.	
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.	
<b>Aspiration hazard</b>	Not likely, due to the form of the product.	
<b>Mixture versus substance information</b>	Not available.	

#### 11.2. Information on other hazards

<b>Endocrine disrupting properties</b>	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
<b>Other information</b>	Not available.

## SECTION 12: Ecological information

**12.1. Toxicity** May cause long lasting harmful effects to aquatic life.

Components	Species	Test Results
Reaction mass of 2-(ethoxydifluoromethyl)-1,1,1,2,		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	EC50	Algae > 100 mg/l, 48 h
Crustacea	NOEC	Daphnia > 100 mg/l, 96 h

trans-dichloroethylene (CAS 156-60-5)

#### **Aquatic**

##### *Acute*

Algae	EC50	Algae	36.36 mg/l, 48 h
Crustacea	LC50	Water flea (Daphnia magna)	170 - 290 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	120 - 160 mg/l, 96 hours

**12.2. Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

#### 12.3. Bioaccumulative potential

##### **Partition coefficient n-octanol/water (log Kow)**

trans-dichloroethylene 2.06

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** No data available.

**12.5. Results of PBT and vPvB assessment** This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

**12.6. Endocrine disrupting properties** None known

**12.7. Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.  
GWP: 3

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Residual waste** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

**EU waste code** The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Disposal methods/information** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Special precautions** Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

**14.1. UN number** UN1950  
**14.2. UN proper shipping name** AEROSOLS  
**14.3. Transport hazard class(es)**  
**Class** 2.2  
**Subsidiary risk** -  
**Hazard No. (ADR)** Not available.  
**Tunnel restriction code** (E)  
**ADR/RID - Classification code:** 5A  
**14.4. Packing group** Not applicable  
**14.5. Environmental hazards** No  
**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

### IATA

**14.1. UN number** UN1950  
**14.2. UN proper shipping name** AEROSOLS  
**14.3. Transport hazard class(es)**  
**Class** 2.2  
**Subsidiary risk** -  
**14.4. Packing group** Not applicable  
**14.5. Environmental hazards** No  
**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

### IMDG

**14.1. UN number** UN1950  
**14.2. UN proper shipping name** AEROSOLS  
**14.3. Transport hazard class(es)**  
**Class** 2.2  
**Subsidiary risk** -  
**14.4. Packing group** Not applicable  
**14.5. Environmental hazards**  
**Marine pollutant** No  
**EmS** F-D, S-U  
**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**14.7. Maritime transport in bulk according to IMO instruments** Not established.



## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### Authorisations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

trans-dichloroethylene (CAS 156-60-5)

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

#### Other EU regulations

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

trans-dichloroethylene (CAS 156-60-5)

#### Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

#### National regulations

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

#### List of abbreviations

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).

CAS: Chemical Abstract Service.

Ceiling: Short Term Exposure Limit Ceiling value.

CEN: European Committee for Standardization.

CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.



GWP: Global Warming Potential.  
IATA: International Air Transport Association.  
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.  
IMDG: International Maritime Dangerous Goods.  
MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG).  
MARPOL: International Convention for the Prevention of Pollution from Ships.  
PBT: Persistent, bioaccumulative and toxic.  
REACH: Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals).  
RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).  
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.  
STEL: Short term exposure limit.  
TLV: Threshold Limit Value.  
TWA: Time Weighted Average.  
VOC: Volatile organic compounds.  
vPvB: Very persistent and very bioaccumulative.  
STEL: Short-term Exposure Limit.

#### References

Not available.

#### Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

#### Full text of any H-statements not written out in full under Sections 2 to 15

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H336 May cause drowsiness or dizziness.  
H412 Harmful to aquatic life with long lasting effects.  
H413 May cause long lasting harmful effects to aquatic life.

#### Revision information

None.

#### Training information

Follow training instructions when handling this material.

#### Disclaimer

CRC Industries Europe bvba cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.