



SAFETY DATA SHEET

1. Identification

Product identifier	Heavy Duty Degreaser
Other means of identification	
Product code	03096
Recommended use	Heavy duty degreaser
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufactured or sold by:	
Company name	CRC Industries, Inc.
Address	885 Louis Dr. Warminster, PA 18974 US
Telephone	
General Information	215-674-4300
Technical Assistance	800-521-3168
Customer Service	800-272-4620
24-Hour Emergency (CHEMTREC)	800-424-9300 (US) 703-527-3887 (International)
Website	www.crcindustries.com

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2B
	Carcinogenicity	Category 1B
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger
Hazard statement	Causes skin irritation. Causes eye irritation. Harmful if inhaled. May cause drowsiness or dizziness. May cause cancer by inhalation or ingestion. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Avoid breathing mist or vapor. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response	If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. If exposed or concerned: Get medical attention. Collect spillage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

Supplemental information

8.92% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride, hydrogen chloride and possibly phosgene.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Tetrachloroethylene	Perchloroethylene	127-18-4	80 - 90
COzol® 210		Proprietary	10 - 20

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	If ingestion of a large amount does occur, call a poison control center immediately. Rinse mouth. Do not induce vomiting.
Most important symptoms/effects, acute and delayed	Irritation of eyes and mucous membranes. Irritation of nose and throat. Exposed individuals may experience eye tearing, redness, and discomfort. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride, hydrogen chloride and possibly phosgene.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors and spray mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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Methods and materials for containment and cleaning up

This product is miscible in water. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. 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.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Use only outdoors or in a well-ventilated area. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains. For product usage instructions, please see the product label.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Trans-1,2-dichloroethylene (CAS 156-60-5)	PEL	790 mg/m3
		200 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Tetrachloroethylene (CAS 127-18-4)	Ceiling	200 ppm
	TWA	100 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Tetrachloroethylene (CAS 127-18-4)	STEL	100 ppm
	TWA	25 ppm
Trans-1,2-dichloroethylene (CAS 156-60-5)	TWA	200 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Trans-1,2-dichloroethylene (CAS 156-60-5)	TWA	790 mg/m3
		200 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Tetrachloroethylene (CAS 127-18-4)	0.5 mg/l	Tetrachloroethylene	Blood	*
	3 ppm	Tetrachloroethylene	End-exhaled air	*

* - For sampling details, please see the source document.

Exposure guidelines

US - Minnesota Haz Subs: Skin designation applies

Tetrachloroethylene (CAS 127-18-4)

Skin designation applies.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) 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. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Wear protective gloves such as: Viton®. Polyvinyl alcohol (PVA).

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

Wear positive pressure self-contained breathing apparatus (SCBA). Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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.

9. Physical and chemical properties

Appearance

Physical state

Liquid.

Form

Liquid.

Color

Colorless.

Odor

Solvent.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

-112 °F (-80 °C) estimated

Initial boiling point and boiling range

119.7 °F (48.7 °C) estimated

Flash point

None (Tag Closed Cup)

Evaporation rate

Fast.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)

6.7 % estimated

Flammability limit - upper (%)

18 % estimated

Vapor pressure

57.7 hPa estimated

Vapor density

> 4 (air = 1)

Relative density

1.58

Solubility (water)

Slight.

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperature

860 °F (460 °C) estimated

Decomposition temperature

Not available.

Viscosity (kinematic)

Not available.

Percent volatile

100 % estimated

10. Stability and reactivity

Reactivity

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

Chemical stability

Material is stable under normal conditions.

Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat, flames and sparks. Contact with incompatible materials. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride, hydrogen chloride and possibly phosgene.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Hydrogen chloride. Hydrogen fluoride. Phosgene. Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Single dose oral toxicity is considered to be extremely low. Swallowing large amounts may cause injury if aspirated into the lungs. This may be rapidly absorbed through the lungs and result in injury to other body systems.
Inhalation	Harmful if inhaled. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Skin contact	Causes skin irritation.
Eye contact	Causes eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Irritation of nose and throat. Irritation of eyes and mucous membranes. May cause redness and pain. Exposed individuals may experience eye tearing, redness, and discomfort. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity Harmful if inhaled. Narcotic effects.

Product	Species	Test Results
Heavy Duty Degreaser		
Acute		
<i>Dermal</i>		
LD50	Rabbit	3380.4077 mg/kg estimated
<i>Inhalation</i>		
LC50	Rat	5757.5757 mg/l, 4 hours estimated 4424.0679 ppm, 4 hours estimated
<i>Oral</i>		
LD50	Rat	2456.9922 mg/kg estimated
Subchronic		
<i>Inhalation</i>		
LC50	Rat	50505.0508 ppm, 90 days estimated

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes eye irritation.
Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Tetrachloroethylene (CAS 127-18-4) 2A Probably carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Tetrachloroethylene (CAS 127-18-4) Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure	Not classified.

Aspiration hazard	Based on available data, the classification criteria are not met. May be an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Product		Species	Test Results
Heavy Duty Degreaser			
Aquatic			
Fish	LC50	Fish	21.0245 mg/l, 96 hours estimated
<i>Acute</i>			
Crustacea	EC50	Daphnia	487.2564 mg/l, 48 hours estimated
Components		Species	Test Results
Tetrachloroethylene (CAS 127-18-4)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4.73 - 5.27 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Tetrachloroethylene 2.88

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal of waste from residues / unused products This material and its container must be disposed of as hazardous waste. Empty container can be recycled. Consult authorities before disposal. 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 in accordance with all applicable regulations.

Hazardous waste code D039: Waste Tetrachloroethylene
F001: Waste Tetrachloroethylene - Spent halogenated solvent used in degreasing
F002: Waste Tetrachloroethylene - Spent halogenated solvent

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number	UN1897
UN proper shipping name	Tetrachloroethylene mixture, Limited Quantity, MARINE POLLUTANT
Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Label(s)	6.1
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB3, N36, T4, TP1
Packaging exceptions	153
Packaging non bulk	203
Packaging bulk	241

IATA

UN number	UN1897
UN proper shipping name	Tetrachloroethylene mixture, Limited Quantity

Transport hazard class(es)**Class** 6.1(PGIII)**Subsidiary risk** -**Packing group** III**Environmental hazards** Yes**ERG Code** 6L**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**Other information****Passenger and cargo aircraft** Allowed.**Cargo aircraft only** Allowed.**IMDG****UN number** UN1897**UN proper shipping name** TETRACHLOROETHYLENE MIXTURE, LIMITED QUANTITY, MARINE POLLUTANT**Transport hazard class(es)****Class** 6.1(PGIII)**Subsidiary risk** -**Packing group** III**Environmental hazards****Marine pollutant** Yes**EmS** F-A, S-A**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**General information** DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.**15. Regulatory information****US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Decafluoropentane (CAS 138495-42-8) 1.0 % One-Time Export Notification only.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Tetrachloroethylene (CAS 127-18-4)

CERCLA Hazardous Substance List (40 CFR 302.4)

Tetrachloroethylene (CAS 127-18-4)

Trans-1,2-dichloroethylene (CAS 156-60-5)

CERCLA Hazardous Substances: Reportable quantity

Tetrachloroethylene (CAS 127-18-4) 100 LBS

Trans-1,2-dichloroethylene (CAS 156-60-5) 1000 LBS

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Tetrachloroethylene (CAS 127-18-4)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**Food and Drug Administration (FDA)** Not regulated.**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Section 311/312** Immediate Hazard - Yes**Hazard categories** Delayed Hazard - Yes

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

US state regulations

US. New Jersey Worker and Community Right-to-Know Act

Tetrachloroethylene (CAS 127-18-4)
Trans-1,2-dichloroethylene (CAS 156-60-5)

US. Massachusetts RTK - Substance List

Tetrachloroethylene (CAS 127-18-4)
Trans-1,2-dichloroethylene (CAS 156-60-5)

US. Pennsylvania Worker and Community Right-to-Know Law

Tetrachloroethylene (CAS 127-18-4)
Trans-1,2-dichloroethylene (CAS 156-60-5)

US. Rhode Island RTK

Tetrachloroethylene (CAS 127-18-4)
Trans-1,2-dichloroethylene (CAS 156-60-5)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Tetrachloroethylene (CAS 127-18-4) Listed: April 1, 1988

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 51.100(s)) 8 %

Consumer products (40 CFR 59, Subpt. C) Not regulated

State

Consumer products This product is not for retail sale. It is for use in the manufacturing process only.

VOC content (CA) 10 %

VOC content (OTC) 8 %

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 06-10-2014
Prepared by Allison Cho
Version # 01
Further information CRC # 894A

HMIS® ratings

Health: 2*
Flammability: 1
Physical hazard: 0
Personal protection: B

NFPA ratings

Health: 2
Flammability: 1
Instability: 0

NFPA ratings



Disclaimer

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.