RED LION RESEARCH

SAFFTY DATA SHFFT

CHROMATE INDUSTRIAL CORPORATION®

5250-A Naiman Parkway, Solon, OH 44139 • 888-567-2206 • www.chromate.com

FOR CHEMICAL EMERGENCY

Call ChemTrec day/night: 1-800-424-9300

1. IDENTIFICATION

PRODUCT NAME: Red Lion Coil/Filter Cleaner DATE PREPARED: June 10, 2015

PART NUMBER: 74165 MANUFACTURER: CHROMATE INDUSTRIAL CORPORATION 5250-A Naiman Parkway, Solon, OH 44139 • www.chromate.com

RECOMMENDED USE: Cleaner. EMERGENCY TELEPHONE NUMBER OF THE COMPANY: (888) 567-2206

RECOMMENDED RESTRICTIONS: None known.

PRODUCT INFORMATION TELEPHONE NUMBER: (888) 567-2206

REGULATORY INFORMATION TELEPHONE NUMBER: (888) 567-2206

TRANSPORTATION EMERGENCY TELEPHONE NUMBER: (800) 424-9300

NATIONAL POISON CENTER: (800) 222-1222

2. HAZARDS IDENTIFICATION

Physical hazards: Gases under pressure.

Compressed gas.

Health hazards:Not classified.Environmental hazards:Not classified.OSHA defined hazards:Not classified.

Label elements:



Signal word: Warning

Hazard statements: Contains gas under pressure; may explode if heated.

Precautionary statements

Prevention: Observe good industrial hygiene practices.

Response: Wash hands after handling.

Storage: Protect from sunlight. Store in a well-ventilated place.

Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

N/A-NOT APPLICABLE N/D-NOT DETERMINED N/E-NONE ESTABLISHED N/R-NOT REGULATED N/L-NOT LISTED

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

Chemical name Common name and synonyms **CAS** number % 7664-41-7 0.1 - 1Anhydrous Ammonia 90 - 100 Other components below reportable levels

4 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.

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

Ingestion: Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed: Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Not available.

Unsuitable extinguishing media: None known.

Specific hazards arising from

the chemical:

Contents under pressure.

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. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose

holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods Cool containers exposed to flames with water until well after the fire is out.

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED N/L - NOT LISTED Page 2 of 10

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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. Emergency personnel need selfcontained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for

Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, containment and cleaning up: flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

7. HANDLING AND STORAGE

Precautions for safe handling:

Pressurized 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. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities:

Contents under pressure. Do not expose to 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 in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1920.1000)

Components	Туре	Value
Anhydrous Ammonia (CAS 7664-41-7)	PEL	35 mg/m ³
		50 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Anhydrous Ammonia (CAS 7664-41-7)	STEL	35 ppm
	TWA	25 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components Anhydrous Ammonia (CAS 7664-41-7)	Type STEL	Value 27 mg/m³
		35 ppm
	TWA	18 mg/m³ 25 ppm

Biological limit values: No biological exposure limits noted for the ingredients(s).

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 ventiliation, 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

Eye/face protection: Wear safety glasses with side shields (or goggles).

Hand protection: Wear appropriate chemical resistant gloves.

Skin protection

Other: Wear suitable protective clothing.

Respiratory protection: If permissible levels are exceeded use NIOSH mechanical filter/organic vapor cartridge or an air-supplied respirator. **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.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state: Gas.

Form: Aerosol. Compressed gas.

Color: Not available.

Odor: Not available.

Odor threshold: Not available.

pH: Not available.

Melting point/freezing point: Not available.

Initial boiling point and boiling range: 212°F (100°C) estimated.

Flash point: Not available.

Evaporation rate: Not available.

Lower and upper flammability or explosive limits

Flammability limit - lower (%)

Flammability limit - upper (%)

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure:Not available.Vapor density:Not available.Relative density:Not available.

Solubility(ies)

Solubility (water)

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Not available.

Not available.

Not available.

Viscosity:

Not available.

Other information

Specific gravity 0.963 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:Hazardous polymerization does not occur.Conditions to avoid:Contact with incompatible materials.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: No hazardous decomposition products are known.

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11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Ingestion Expected to be a low ingestion hazard.

InhalationNo adverse effects due to inhalation are expected.Skin contactNo adverse effects due to skin contact are expected.Eye contactDirect contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics: Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components Species Test Results

Anhydrous Ammonia (CAS 7664-41-7)

Acute

Inhalation

LC50 Mouse 4230 ppm, If <1L: Consumer Commodity

Hours

Rat 7939 mg/m³

4000 ppm; If 1L: Consumer Commodity

Hours

Oral

LD50 Rat 350 mg/kg

Skin corrosion/irritation: Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye Direct contact with eyes may cause temporary irritation.

irritation:

Resiratory or skin sensitization

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.

Carcinogencity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ Not classified.

toxicity - single exposure:

Specific target organ Not classified.

toxicity - repeated exposure:

Aspiration hazard: Not likely, due to the form of the product.

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

12. ECOLOGICAL INFORMATION

Ecotoxicity: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species Test Results

Anhydrous Ammonia (CAS 7664-41-7)

Aquatic

Fish LC50 Chinook salmon (Oncorhynchus tshawytscha) 0.43 - 0.47 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.

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 instructions: Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues/unused products: 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: 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. Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

UN number UN1950

UN proper shipping name Aerosols, non-flammable, (each not exceeding 1 L capacity)

Transport hazard class(es)

Class 2.2
Subsidiary risk Label(s) 2.2

Packing group Not applicable.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging exceptions306Packaging non bulkNonePackaging bulkNone

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED N/L — NOT LISTED

14. TRANSPORT INFORMATION CONTINUED

IATA

UN1950 **UN** number

UN proper shipping name Aerosols, non-flammable

Transport hazard class(es)

Class 2.2 Subsidiary risk Label(s) 2.2

Packing group Not applicable.

Environmental hazards No. **ERG Code** 2L

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

UN1950 **UN** number **AEROSOLS UN proper shipping name** Transport hazard class(es)

Class 2.2 Subsidiary risk Label(s) 2.2

Packing group Not applicable.

Environmental hazards Marine pollutant No.

Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. **Packaging exceptions**

LTD QTY

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IATA; IMDG

Not applicable.



DOT



15. REGULATORY INFORMATION

U.S. 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): Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4):

Anhydrous Ammonia (CAS 7664-41-7) Listed.

SARA 304 Emergency release notification:

Anhydrous Ammonia (CAS 7664-41-7) 100 lbs.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

N/E — NONE ESTABLISHED N/A — NOT APPLICABLE N/D — NOT DETERMINED N/R — NOT REGULATED N/L - NOT LISTED

15. REGULATORY INFORMATION CONTINUED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - Yes Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name CAS number Reportable quantity Threshold Threshold Threshold planning quantity planning quantity, planning lower value quantity, upper value

Anhydrous Ammonia 7664-41-7 100 500 lbs

SARA 311/312 hazardous chemical: No.

SARA 313 (TRI reporting):

Chemical nameCAS number% by weightAnhydrous Ammonia7664-41-70.1 - 1

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Anhydrous Ammonia (CAS 7664-41-7) Safe Drinking Water Act (SDWA): Not regulated.

US State Regulations

US. Massachusetts RTK - Substance List

Anhydrous Ammonia (CAS 7664-41-7)

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

Anhydrous Ammonia (CAS 7664-41-7)

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

Anhydrous Ammonia (CAS 7664-41-7)

US. Rhode Island RTK

Anhydrous Ammonia (CAS 7664-41-7)

US. California Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

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15. REGULATORY INFORMATION CONTINUED

International Inventories

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

^{*}A "Yes" indicated that all components of this product comply with the inventory requirements administed 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

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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