



**SAFETY DATA SHEET**  
Prepared by Duro Dyne June 3, 2016

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Trade name:** DURO DYNE Coil Cleaner – Foaming  
**Product Identifier:** FACC  
**Item #:** 5121  
**Supplier Details:** DURO DYNE CORPORATION  
81 Spence Street  
Bay Shore, NY 11706

**Information**  
**Phone No:** 800-899-3876  
**Emergency**  
**Phone No:** 800-424-9300 (CHEMTREC)

**2. HAZARD IDENTIFICATIONS**

**Physical hazards** Flammable aerosols Category 1  
**Health hazards** Not classified.  
**Environmental hazards** Not classified.  
**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger  
**Hazard statement** Extremely flammable aerosol.  
**Precautionary statement**

**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

**Response** Wash hands after handling.

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

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

**Hazard(s) not otherwise Classified (HNOC)**                      None known

**Supplemental information**                      None

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### **Mixtures**

<b><u>Chemical name</u></b>	<b><u>Common name and synonyms</u></b>	<b><u>CAS number</u></b>	<b><u>%</u></b>
<b><u>Butane</u></b>		106-97-8	1 - 2.5
<b><u>Propane</u></b>		74-98-6	1 - 2.5
<b><u>Sodium Nitrite</u></b>		7632-00-0	0.1 - 1
Other components below reportable levels			90 - 100

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret

### **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.

**Eye 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.

<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Fire-fighting Equipment/instructions</b>	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.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Extremely flammable aerosol.

## **6.ACCIDENTAL RELEASE MEASURES**

<b>Personal precautions, protective equipment and emergency procedures</b>	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. 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.
<b>Methods and materials for containment and cleaning up</b>	Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, 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.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground

## **7.HANDLING AND STORAGE**

<b>Precautions for safe handling</b>	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. All equipment used when handling the product must be grounded. 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**

Level 1 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source.

Refrigeration recommended. 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)**

<b>Components</b>	<b>Type</b>	<b>Value</b>
Propane (CAS 74-98-6)	PEL	1800 mg/m3 1000 ppm
<b>US. ACGIH Threshold Limit Values</b>		
<b>Components</b>	<b>Type</b>	<b>Value</b>
Butane (CAS 106-97-8)	STEL	1000 ppm
<b>US. NIOSH: Pocket Guide to Chemical Hazards</b>		
<b>Components</b>	<b>Type</b>	<b>Value</b>
Butane (CAS 106-97-8)	TWA	1900 mg/m3 800 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm

**Biological limit values**

No biological exposure limits noted for the ingredient(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 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**

**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.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	
<b>Physical state</b>	Gas.
<b>Form</b>	Aerosol.
<b>Color</b>	Not available.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	212 °F (100 °C) estimated
<b>Flash point</b>	-156.0 °F (-104.4 °C) Propellant estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	80 psig @70F estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility (ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (N-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Specific gravity</b>	0.936 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** Hazardous polymerization does not occur.

## reactions

**Conditions to avoid** Avoid temperatures exceeding the flash point. Contact with incompatible materials.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** No hazardous decomposition products are known.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Ingestion** Expected to be a low ingestion hazard.  
**Inhalation** No adverse effects due to inhalation are expected.  
**Skin contact** No adverse effects due to skin contact are expected.  
**Eye contact** Direct 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

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Butane (CAS 106-97-8)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Mouse	1237 mg/l, 120 Minutes 52 %, 120 Minutes
	Rat	1355 mg/l
Propane (CAS 74-98-6)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Mouse	1237 mg/l, 120 Minutes 52 %, 120 Minutes
	Rat	1355 mg/l 658 mg/l/4h
Sodium Nitrite (CAS 7632-00-0)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	180 mg/kg

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

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.  
**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

**Respiratory 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.

**Carcinogenicity**

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 toxicity-single exposure**

Not classified.

**Specific target organ toxicity-repeated exposure**

Not classified.

**Aspiration hazard**

Not likely, due to the form of the product.

**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**

Sodium Nitrite (CAS 7632-00-0)

**Aquatic**

Crustacea

EC50

Greasyback shrimp (*Metapenaeus ensis*)

16.14 - 26.61 mg/l, 48 hours

Fish

LC50

Rainbow trout, donaldson trout (*Oncorhynchus mykiss*)

0.15 - 0.25 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)**

Butane

2.89

Propane

2.36

**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** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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** 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: products 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**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.1
<b>Packing group</b>	Not applicable.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	N82
<b>Packaging exceptions</b>	306
<b>Packaging non bulk</b>	None
<b>Packaging bulk</b>	None

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.

**IATA**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.1
<b>Packing group</b>	Not applicable
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	10L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

**Other information**

<b>Passenger and cargo aircraft</b>	Allowed.
-------------------------------------	----------

<b>Cargo aircraft only</b>	Allowed.
----------------------------	----------

<b>Packaging Exceptions</b>	LTD QTY
-----------------------------	---------

**IMDG**

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.1
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No
<b>EmS</b>	F-D, S-U
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

<b>Packaging Exceptions</b>	LTD QTY
-----------------------------	---------

<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.
---	-----------------

**DOT**



IATA; IMDG



## **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)**

Not regulated.

### **CERCLA Hazardous Substance List (40 CFR 302.4) Sodium Nitrite (CAS 7632-00-0)**

Listed

### **SARA 304 Emergency release notification**

Not regulated.

### **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

### **Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories**

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

### **SARA 302 Extremely hazardous substance**

Not listed

### **SARA 311/312 Hazardous chemical**

No

### **SARA 313 (TRI reporting)**

<b><u>Chemical Name</u></b>	<b><u>CAS Number</u></b>	<b><u>% by wt.</u></b>
Sodium Nitrite	7632-00-0	0.1 - 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)**

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

**Safe Drinking Water Act****(SDWA)**

Not regulated.

**US state regulations****US. Massachusetts RTK - Substance List**

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Sodium Nitrite (CAS 7632-00-0)

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

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Sodium Nitrite (CAS 7632-00-0)

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

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Sodium Nitrite (CAS 7632-00-0)

**US. Rhode Island RTK**

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Sodium Nitrite (CAS 7632-00-0)

**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.

**International Inventories**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
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 Commercial 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" 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).

**Date SDS Prepared:** 7/29/16

THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE. BECAUSE SOME OF THE INFORMATION IS DERIVED FROM INFORMATION PROVIDED TO DURO DYNE CORPORATION FROM ITS SUPPLIERS, DURO DYNE CORPORATION MAKES NO WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OF THE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SINCE THE USE OF THIS INFORMATION AND THE CONDITIONS AND USE OF THIS PRODUCT ARE CONTROLLED BY THE USER, IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THE PRODUCT. THE INFORMATION IS SUPPLIED FOR YOUR INFORMATION AND CONSIDERATION AND DURO DYNE CORPORATION ASSUMES NO RESPONSIBILITY FOR USE OR RELIANCE THEREON. IT IS THE RESPONSIBILITY OF THE USER OF DURO DYNE CORPORATION PRODUCTS TO COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.