

**ABRO Radiator Rust Inhibitor**

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Product Name	ABRO Radiator Rust Inhibitor
Product code	RI-707
CAS No.	Not applicable.
EC No.	Not applicable.
REACH Registration No.	Not known.

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

Identified Use(s)	Rust Inhibitor.
Uses Advised Against	Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer	
Company Identification	ABRO Industries Inc
Address of Manufacturer	3580 Blackthorn Court South Bend USA
Postal code	46628
Telephone:	+1 574-232-8289
Fax	Not known.
E-mail	abro@abro.com
Office hours	
Supplier	
Company Identification	Granville Oil & Chemicals Ltd
Address of Supplier	29 Goldthorpe Ind. Est., Goldthorpe, Rotherham, South Yorkshire,
Postal code	S63 9BL
Telephone:	+44 (0)1709 890099
Fax	Not known.
E-mail	lab@granvilleoil.com
Office hours	08:00 - 17:00

1.4 Emergency telephone number

Contact	NHS Direct
Emergency Phone No.	+44 111

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

Regulation (EC) No. 1272/2008 (CLP) Repr. 1B :May damage fertility or the unborn child.

2.2 Label elements

**ABRO Radiator Rust Inhibitor**

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name

ABRO Radiator Rust Inhibitor

Hazard Pictogram(s)



GHS08

Signal Word(s)

Danger

Hazard Statement(s)

H360: May damage fertility or the unborn child.

Precautionary Statement(s)

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P405: Store locked up.
P501: Dispose of contents in accordance with local, state or national legislation.

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Boric acid, sodium salt, pentahydrate	11130-12-4	601-071-6	2.0 -4.0 %	Repr. 1B H360	GHS08

Contains no non-classified vPvB substances.

Contains a non-classified substance with a Union workplace exposure limit. Propane-1,2-diol total vapour and particulates (57-55-6)

For full text of H/P Statements see section 16.

SECTION 4: FIRST AID MEASURES

**ABRO Radiator Rust Inhibitor****4.1 Description of first aid measures**

Inhalation	No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If breathing is difficult, give oxygen. Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear.
Skin Contact	No specific treatment is necessary, since this material is not likely to be hazardous. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical aid if irritation develops or persists.
Eye Contact	No specific treatment is necessary, since this material is not likely to be hazardous. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
Ingestion	No specific treatment is necessary, since this material is expected to be non-hazardous. Wash mouth out with water. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

If exposed or concerned: Get medical advice/attention. Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media**

Suitable Extinguishing media	As appropriate for surrounding fire.
Unsuitable extinguishing media	None.

5.2 Special hazards arising from the substance or mixture

Carbon monoxide, carbon dioxide, oxides of boron.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Use proper personal protective equipment as indicated in Section 8. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause a slipping hazard.

6.2 Environmental precautions

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Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.
See Section 12, Ecological Information.

6.3 Methods and material for containment and cleaning up

Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal.

6.4 Reference to other sections

See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling**

Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

None known.

7.3 Specific end use(s)

Rust Inhibitor.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters****8.1.1 Occupational Exposure Limits**

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Propane-1,2-diol total vapour and particulates	57-55-6	150	474			
Propane-1,2-diol particulates	57-55-6		10			
Disodium tetraborate, pentahydrate	11130-12-4		1			

Region Source
United Kingdom UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)

Remark Notes

8.2 Exposure controls

8.2.1. Appropriate engineering controls There are no special ventilation requirements. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

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8.2.2. Personal protection equipment



Eye Protection

Wear eye protection with side protection (EN166).



Skin protection

Wear protective clothing and gloves: Impervious gloves (EN 374).



Respiratory protection

Respirator protection is not normally required. A respiratory protection program that meets European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.



Thermal hazards

None known.

8.2.3. Environmental Exposure Controls Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Physical state	Liquid.
Colour	Clear.
Odour	No notable odor.
Melting point/freezing point	Not known.
Boiling point or initial boiling point and boiling range	Not known.
Flammability	Not known.
Lower and upper explosion limit	Not known.
Flash Point	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature	Not known.
pH	8.34 - 9.22.
Kinematic Viscosity	Not known.
Solubility	Solubility (Water) : Not known. Solubility (Other) : Not known.
Partition coefficient n-octanol/water (log value)	Not known.
Vapour pressure	Not known.
Density and/or relative density	8.31 - 8.73 LBS/GAL at 75.0 F (23.9 C).
Relative vapour density	Not known.
Particle characteristics	Not known.

9.2 Other information

None.

SECTION 10: STABILITY AND REACTIVITY

**ABRO Radiator Rust Inhibitor****10.1 Reactivity**

None anticipated.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

Excess heat, moist air.

10.5 Incompatible materials

Not known.

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide, oxides of boron.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity - Ingestion	Calculation method : Not classified.
Acute toxicity - Skin Contact	Calculation method : Not classified.
Acute toxicity - Inhalation	Calculation method : Not classified.
Skin corrosion/irritation	Calculation method : Not classified.
Serious eye damage/irritation	Calculation method : Not classified.
Skin sensitization data	Calculation method : Not classified.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Not classified.
Carcinogenicity	Calculation method : Not classified.
Reproductive toxicity	Calculation method : May damage fertility or the unborn child.
Lactation	Calculation method : Not classified.
STOT - single exposure	Calculation method : Not classified.
STOT - repeated exposure	Calculation method : Not classified.
Aspiration hazard	Calculation method : Not classified.

11.2 Information on other hazards

Not known.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
Toxicity - Fish	Low toxicity to fish.
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

12.2 Persistence and degradability

Borax is an inorganic substance and does not biodegrade. Under environmental conditions, borates decompose to undissociated boric acid..

**ABRO Radiator Rust Inhibitor****12.3 Bioaccumulative potential**

Bioconcentration potential is low.

12.4 Mobility in soil

Potential for mobility in soil is very high.

12.5 Results of PBT and vPvB assessment

Not known.

12.6 Endocrine disrupting properties

None known.

12.7 Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Dispose of contents in accordance with local, state or national legislation.
Dispose of this material and its container to hazardous or special waste collection point. Dispose at suitable refuse site.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION**Not classified as hazardous for transport.****14.1 UN number or ID number**

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not classified as a Marine Pollutant.

14.6 Special precautions for user

Not known

14.7 Maritime transport in bulk according to IMO instruments

Not known

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern Not listed

High Concern for Authorisation

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REACH: ANNEX XIV list of substances Not listed
subject to authorisation

REACH: Annex XVII Restrictions on the Boric acid, sodium salt, pentahydrate (11130-12-4)
manufacture, placing on the market and
use of certain dangerous substances,
mixtures and articles

Community Rolling Action Plan Not listed
(CoRAP)

Regulation (EU) N° 2019/1021 of the Not listed
European Parliament and of the Council
on persistent organic pollutants

Regulation (EC) N° 1005/2009 on Not listed
substances that deplete the ozone layer

Regulation (EU) N° 649/2012 of the Not listed
European Parliament and of the Council
concerning the export and import of
hazardous chemicals

National regulations

Other Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)



GHS08

Hazard classification

Repr. 1B : Reproductive toxicity, Category 1B

Hazard Statement(s)

H360: May damage fertility or the unborn child.

Precautionary Statement(s)

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
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**ABRO Radiator Rust Inhibitor**

Acronyms

ATE : Acute Toxicity Estimate
CAS : Chemical Abstracts Service
CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL : Derived No Effect Level
EC : European Community
EINECS : European Inventory of Existing Commercial Chemical Substances
LTEL : Long term exposure limit
PBT : Persistent, Bioaccumulative and Toxic
PNEC : Predicted No Effect Concentration
REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL : Short term exposure limit
STOT : Specific Target Organ Toxicity
vPvB : very Persistent and very Bioaccumulative

Key literature references and sources
for data used to compile the SDS

Regulation (EC) No. 1272/2008 (CLP)

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