

IRON REMOVER PLUS - RTU

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Section 1: IDENTIFICATION

1.1 Product identifier

Trade name

Iron Remover Plus

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

Relevant identified uses

Iron remover
Professional use
Industrial use

HS code

3402.42.90

1.3 Details of the distributor

Interchem Limited
9th Avenue South,
Barataria, Trinidad and Tobago.
Telephone: 1.868.235.CHEM (2436)
E-mail: sales@interchem.co.tt
Website: www.interchem.co.tt

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section	Hazard class	Category	Hazard class and category	Hazard statement
A.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
A.4S	skin sensitization	1	Skin Sens. 1	H317

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word warning

- Pictograms

GHS07



- Hazard statements

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

- Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	If on skin: Wash with plenty of water.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321	Specific treatment (see on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- Hazardous ingredients for labelling

(2-hydroxyethyl)ammonium mercaptoacetate

2.3 Other hazards

Hazards not otherwise classified

May be harmful if swallowed (GHS category 5: acutely toxic - oral).

Toxic to aquatic life with long lasting effects (GHS category 2: aquatic toxicity - acute and/or chronic).

Causes mild skin irritation (GHS category 3: irritant to skin).

Results of PBT and vPvB assessment

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Hazardous ingredients acc. to GHS				
Name of substance	Identifier	Wt%	Classification acc. to GHS	Notes
(2-hydroxyethyl)ammonium mercaptoacetate	CAS No 126-97-6	5-<12	Acute Tox. 4 / H302 Skin Sens. 1B / H317	
disodium 4,5-dihydroxybenzene-1,3-disulphonate	CAS No 149-45-1	1-<5	Eye Irrit. 2 / H319	
2-(2-butoxyethoxy)ethanol	CAS No 112-34-5	1-<5	Eye Irrit. 2 / H319	
Alcohols, C11-15- secondary, ethoxylated	CAS No 84133-50-6	1-<3	Skin Irrit. 2 / H315 Eye Dam. 1 / H318	
benzaldehyde	CAS No 100-52-7	0.1-<1	Acute Tox. 4 / H302 Acute Tox. 3 / H331 Flam. Liq. 4 / H227	

For full text of abbreviations: see SECTION 16.

This table, if present, includes all GHS classified ingredients present above their cut-off limits, even if the finished product is not classified as hazardous by GHS.

Section 4: FIRST-AID MEASURES

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

Section 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO₂)

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

Section 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation
Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feeding stuffs.

7.2 Conditions for safe storage, including any incompatibilities

Control of the effects

Protect against external exposure, such as
Frost

- Packaging compatibilities

Only packaging's which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure controls

Appropriate engineering controls
General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	colorless to pale pink
Particle	not relevant (liquid)
Odor	fruity

Other safety parameters

pH (value)	6–8 (25 °C)
Melting point/freezing point	not determined
Initial boiling point and boiling range	100 °C
Flash point	114 °C at 101 kPa
Evaporation rate	Not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	32 hPa at 25 °C
Density	1 g/ml
Vapor density	this information is not available

Solubility(ies)

- Water solubility	miscible in any proportion
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Partition coefficient

- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	210 °C (auto-ignition temperature (liquids and gases))
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none

9.2 Other information

Temperature class (USA, acc. to NEC 500)	T3 (maximum permissible surface temperature on the equipment: 200°C)
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Section 10: STABILITY AND REACTIVITY

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

Mixture with acids will generate poisonous hydrogen sulphide gas.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Acids, Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful if swallowed.

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
(2-hydroxyethyl)ammonium mercaptoacetate	126-97-6	oral	318 mg/kg
benzaldehyde	100-52-7	oral	1,430 mg/kg
benzaldehyde	100-52-7	inhalation: vapor	5 mg/l/4h

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
(2-hydroxyethyl)ammonium mercaptoacetate	126-97-6	LC50	>100 mg/l	fish	96 h
(2-hydroxyethyl)ammonium mercaptoacetate	126-97-6	EC50	>100 mg/l	aquatic invertebrates	48 h
(2-hydroxyethyl)ammonium mercaptoacetate	126-97-6	ErC50	65 mg/l	algae	72 h
disodium 4,5-dihydroxybenzene-1,3-disulphonate	149-45-1	EC50	>100 mg/l	aquatic invertebrates	48 h
disodium 4,5-dihydroxybenzene-1,3-disulphonate	149-45-1	ErC50	0.49 mg/l	algae	72 h
2-(2-butoxyethoxy)ethanol	112-34-5	LC50	1,300 mg/l	fish	96 h
2-(2-butoxyethoxy)ethanol	112-34-5	EC50	>100 mg/l	aquatic invertebrates	48 h
2-(2-butoxyethoxy)ethanol	112-34-5	ErC50	>100 mg/l	algae	96 h

Alcohols, C11-15- secondary, ethoxylated	84133-50-6	LC50	39 mg/l	fathead minnow	96 h
Alcohols, C11-15- secondary, ethoxylated	84133-50-6	LC50	45 mg/l	daphnia magna	48 h
benzaldehyde	100-52-7	LC50	12 mg/l	fish	96 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
(2-hydroxyethyl)ammonium mercaptoacetate	126-97-6	EC50	>1,000 mg/l	microorganisms	3 h
benzaldehyde	100-52-7	EC50	50 mg/l	aquatic invertebrates	24 h

12.1 Persistence and degradability

Data are not available.

12.2 Bioaccumulative potential

Data are not available.

12.3 Mobility in soil

Data are not available.

12.4 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance in a concentration of $\geq 0.1\%$.

12.5 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0.1\%$.

12.6 Other adverse effects

Data are not available.

Section 13: DISPOSAL INFORMATION

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packaging's which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

Section 14: TRANSPORT INFORMATION

14.1 UN number

DOT

UN 3082

Not regulated under DOT until packaged in single containers larger than 119 gallons each (liquid) or 882 lbs each (solid).

IMDG-Code

UN 3082

ICAO-TI

UN 3082

14.2 UN proper shipping name

DOT

Environmentally hazardous substance, liquid, n.o.s.

IMDG-Code

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

ICAO-TI

Environmentally hazardous substance, liquid, n.o.s.

Technical name (hazardous ingredients)

disodium 4,5-dihydroxybenzene-1,3-disulphonate, benzaldehyde

14.3 Transport hazard class(es)

DOT

9

IMDG-Code

9

ICAO-TI

9

14.4 Packing group

DOT

III

IMDG-Code

III

ICAO-TI

III

14.5 Environmental hazards

Environmentally hazardous substance (aquatic environment)

hazardous to the aquatic environment

disodium 4,5-dihydroxybenzene-1,3-disulphonate, benzaldehyde

14.6 Special precautions for user

There is no additional information

14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT)

Not regulated under DOT until packaged in single containers larger than 119 gal- lons each - liquid, or 882 lbs each - solid.

Particulars in the shipper's declaration

UN3082, Environmentally hazardous substance, liquid, n.o.s., (contains: disodium 4,5-dihydroxybenzene-1,3-disulphonate, benzaldehyde), 9,III

Reportable quantity (RQ)

28,216,704 lbs (12,810,384 kg) (isobutyl acetate) (isopentyl acet- ate)

Danger label(s)

9, fish and



Environmental hazards

yes (hazardous to the aquatic environment)

Special provisions (SP)

8, 146, 173, 335, IB3, T4, TP1, TP29

ERG No

171

International Maritime Dangerous Goods Code (IMDG)

Marine pollutant yes (hazardous to the aquatic environment) (disodium 4,5-dihydroxy- benzene-1,3-disulphonate)

Danger label(s) 9, fish and tree



Special provisions (SP) 274, 335, 969

Excepted quantities (EQ) E1

Limited quantities (LQ) 5 L

EmS F-A, S-F

Stowage category A

International Civil Aviation Organization (ICAO-IATA/DGR)

Environmental hazards yes (hazardous to the aquatic environment)

Danger label(s) 9, fish and tree



Special provisions (SP) A97, A158, A197

Excepted quantities (EQ) E1

Limited quantities (LQ) 30 kg

Section 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA)

all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)
none of the ingredients are listed
- Specific Toxic Chemical Listings (EPCRA Section 313)
none of the ingredients are listed

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	CAS No	Functionality	Authoritative Lists
water	7732-18-5	solvent	
(2-hydroxyethyl)ammonium mercaptoacetate	126-97-6	metal cleaner	
2-(2-butoxyethoxy)ethanol		co-solvent	CA TACs
Alcohols, C11-15- secondary, ethoxylated	84133-50-6	surfactant	
benzaldehyde	100-52-7	fragrance	

Name of substance	CAS No	Functionality	Authoritative Lists
isobutyl acetate	110-19-0	fragrance	
isopentyl acetate	123-92-2	fragrance	
Benzyl acetate	140-11-4	fragrance	

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshold	De Minimis Concentration Threshold
2-(2-butoxyethoxy)ethanol		1022			1.0 %

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
2-(2-butoxyethoxy)ethanol			
benzaldehyde	100-52-7		F2

Legend

F2 Flammable - Second Degree

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- Hazardous Substance List (Chapter 323) (PA-RTK)

Name of substance	CAS No	References
benzaldehyde	100-52-7	F
benzaldehyde	100-52-7	F
benzaldehyde	100-52-7	F

Legend

E Flammability (NFPA®)

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

VOC content

- Regulated Volatile Organic Compounds (VOC-EPA) 0.27 %
- Regulated Volatile Organic Compounds (VOC-Cal ARB) 0.27 %

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	/	none
Health	2	temporary or minor injury may occur
Flammability	1	material that must be preheated before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

Chronic: chronic hazard
 Flammability: flammability hazards
 Health: health hazard
 Personal protection: personal protective equipment (PPE) for normal use
 Physical hazard: reactivity

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	1	material that must be preheated before ignition can occur
Health	2	material that, under emergency conditions, can cause temporary incapacitation or residual injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.