



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

D5 Iron Remover

Version number: GHS 2.0
Replaces version of: 2016-09-30 (GHS 1)

revision: 2017-01-06

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name **D5 Iron Remover**
Registration number (REACH) not relevant (mixture)

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

Relevant identified uses vehicle wheel cleaner

1.3 Details of the supplier of the safety data sheet

B&B Blending, LLC
10963 Leroy Drive
CO 80233 Northglenn
United States

Telephone: 1.800.875.6320, 1.303.289.6320
e-mail: info@bbblending.com
Website: bbblending.com

Competent person responsible for the safety data sheet Robert Blahnik
e-mail (competent person) bblahnik@bbblending.com

1.4 Emergency telephone number

Emergency information service USA 1.800.535.5053, INTL 1.352.323.3500
This number is only available during the following of-
fice hours: Mon-Fri 09:00 AM - 05:00 PM

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Cat-egory	Hazard class and category	Hazard state-ment
3.1O	acute toxicity (oral)	Cat. 4	(Acute Tox. 4)	H302
3.4S	skin sensitisation	Cat. 1A	(Skin Sens. 1A)	H317
4.1C	hazardous to the aquatic environment - chronic hazard	Cat. 3	(Aquatic Chronic 3)	H412

Remarks

For full text of H-phrases: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word

Warning

Pictograms



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GHS07



Hazard statements

H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Precautionary statements - prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - response

P321 Specific treatment (see on this label).
P330 Rinse mouth.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Precautionary statements - disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazardous ingredients for labelling: sodium thioglycolate solution

2.3 Other hazards

There is no additional information.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC
sodium thioglycolate solution	CAS No 367-51-1 EC No 206-696-4	10 - < 25	Acute Tox. 3 / H301 Skin Sens. 1A / H317
diethylene glycol monobutyl ether	CAS No 112-34-5 EC No 203-961-6	1 - < 5	Eye Irrit. 2 / H319
polyethylene glycol (5) undecyl ether	CAS No 34398-01-1	1 - < 5	Acute Tox. 4 / H302 Aquatic Chronic 2 / H411



Safety Data Sheet

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For full text of abbreviations: see SECTION 16. Exact percentage of ingredients is withheld as a trade secret.

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. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

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

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

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. Co-ordinate 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.



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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 vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains.

Advices 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 feed-stuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

Incompatible substances or mixtures

Observe hints for combined storage.

• Control of effects

• Protect against external exposure, such as

frost

7.3 Specific end use(s)

See section 16 for a general overview.



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Source
EU	2-(2-butoxyethoxy)ethanol	112-34-5	IOELV	10	67.5	15	101.2	2006/15/EC
GB	2-(2-butoxyethoxy)ethanol	112-34-5	WEL	10	67.5	15	101.2	EH40/2005

Notation

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average

Relevant DNELs/DMELs/PNECs and other threshold levels

• relevant DNELs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
sodium thioglycolate solution	367-51-1	DNEL	2.06 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
sodium thioglycolate solution	367-51-1	DNEL	1.41 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
diethylene glycol monobutyl ether	112-34-5	DNEL	67.5 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
diethylene glycol monobutyl ether	112-34-5	DNEL	20 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
diethylene glycol monobutyl ether	112-34-5	DNEL	67.5 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects

• relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
sodium thioglycolate solution	367-51-1	PNEC	38 µg/l	aquatic organisms	freshwater	short-term (single instance)
sodium thioglycolate solution	367-51-1	PNEC	3.8 µg/l	aquatic organisms	marine water	short-term (single instance)
sodium thioglycolate solution	367-51-1	PNEC	3.2 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
sodium thioglycolate solution	367-51-1	PNEC	380 µg/l	aquatic organisms	water	intermittent release
diethylene glycol monobutyl ether	112-34-5	PNEC	1 mg/l	aquatic organisms	freshwater	short-term (single instance)
diethylene glycol monobutyl ether	112-34-5	PNEC	0.1 mg/l	aquatic organisms	marine water	short-term (single instance)



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according to Regulation (EC) No. 1907/2006 (REACH)

D5 Iron Remover

Version number: GHS 2.0
Replaces version of: 2016-09-30 (GHS 1)

revision: 2017-01-06

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
diethylene glycol monobutyl ether	112-34-5	PNEC	200 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
diethylene glycol monobutyl ether	112-34-5	PNEC	4 mg/kg	benthic organisms	sediments	short-term (single instance)
diethylene glycol monobutyl ether	112-34-5	PNEC	0.4 mg/kg	pelagic organisms	sediments	short-term (single instance)
diethylene glycol monobutyl ether	112-34-5	PNEC	56 mg/kg	(top) predators	water	short-term (single instance)
diethylene glycol monobutyl ether	112-34-5	PNEC	0.4 mg/kg	terrestrial organisms	soil	short-term (single instance)
diethylene glycol monobutyl ether	112-34-5	PNEC	3.9 mg/l	aquatic organisms	water	intermittent release

8.2 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.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

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



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according to Regulation (EC) No. 1907/2006 (REACH)

D5 Iron Remover

Version number: GHS 2.0
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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Colour	colorless to pale pink
Odour	characteristic - slightly sulfurous

Other physical and chemical parameters

pH (value)	6 - 8 (25 °C)
Melting point/freezing point	not determined
Initial boiling point and boiling range	100 °C
Flash point	not determined
Evaporation rate	not determined
Flammability (solid, gas)	not relevant (fluid) non-flammable
Explosive limits	not determined
Vapour pressure	31.69 hPa at 25 °C
Density	1.041 - 1.042 g/ml
Solubility(ies)	
Water solubility	miscible in any proportion
Partition coefficient	
n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	210 °C
Viscosity	not determined
Explosive properties	none
Oxidising properties	none

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

No known hazardous reactions.

10.4 Conditions to avoid

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

Physical stresses which might result in a hazardous situation and have to be avoided

strong shocks

10.5 Incompatible materials

There is no additional information.



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Replaces version of: 2016-09-30 (GHS 1)

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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 according to GHS (1272/2008/EC, CLP)

Acute toxicity

Harmful if swallowed.

• Acute toxicity estimate (ATE)

oral 1,037 mg/kg

• Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	ATE
sodium thioglycolate solution	367-51-1	oral	200 mg/kg
polyethylene glycol (5) undecyl ether	34398-01-1	oral	1,400 mg/kg

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

Aquatic toxicity (acute)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
sodium thioglycolate solution	367-51-1	LC50	>100 mg/l	fish	96 h
sodium thioglycolate solution	367-51-1	EC50	38 mg/l	aquatic invertebrates	48 h
diethylene glycol monobutyl ether	112-34-5	LC50	1,300 mg/l	fish	96 h
diethylene glycol monobutyl ether	112-34-5	EC50	>100 mg/l	aquatic invertebrates	48 h
diethylene glycol monobutyl ether	112-34-5	ErC50	>100 mg/l	algae	96 h



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D5 Iron Remover

Version number: GHS 2.0
Replaces version of: 2016-09-30 (GHS 1)

revision: 2017-01-06

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
polyethylene glycol (5) undecyl ether	34398-01-1	EC50	>1 mg/l	fish	48 h

Aquatic toxicity (chronic)

May cause long-term adverse effects in the aquatic environment.

12.2 Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
diethylene glycol monobutyl ether	112-34-5	oxygen depletion	85 %	28 d

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
sodium thioglycolate solution	367-51-1		-2.99 (pH value: 7, 22 °C)	
diethylene glycol monobutyl ether	112-34-5		1 (pH value: 7, 20 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

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/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) 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.



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SECTION 14: Transport information

- 14.1 UN number (not subject to transport regulations)
- 14.2 UN proper shipping name not relevant
- 14.3 Transport hazard class(es)
Class -
- 14.4 Packing group not relevant
- 14.5 Environmental hazards none (non-environmentally hazardous acc. to the dangerous goods regulations)
- 14.6 Special precautions for user
There is no additional information.
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
The cargo is not intended to be carried in bulk.

SECTION 15: Regulatory information

- 15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture**
Relevant provisions of the European Union (EU)
- **Limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products (2004/42/EC, Deco-Paint Directive)**
VOC content 21.74 %
 - **Directive on industrial emissions (VOCs, 2010/75/EU)**
VOC content 18.92 %
- 15.2 **Chemical Safety Assessment**
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.1	Trade name: Iron Remover	Trade name: D5 Iron Remover	yes
1.4	Emergency information service: USA 1.800.535.5053, INTL 1.352.323.3500 This number is only available during the following of- fice hours: Mon-Fri 09:00 - 17:00	Emergency information service: USA 1.800.535.5053, INTL 1.352.323.3500 This number is only available during the following of- fice hours: Mon-Fri 09:00 AM - 05:00 PM	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2006/15/EC	Commission Directive establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC
Acute Tox.	Acute toxicity
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor



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D5 Iron Remover

Version number: GHS 2.0
Replaces version of: 2016-09-30 (GHS 1)

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Abbr.	Descriptions of used abbreviations
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
COD	Chemical oxygen demand
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IOELV	Indicative occupational exposure limit value
log KOW	n-Octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Skin Sens.	Skin sensitisation
STEL	Short-term exposure limit
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards/environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

D5 Iron Remover

Version number: GHS 2.0
Replaces version of: 2016-09-30 (GHS 1)

revision: 2017-01-06

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Disclaimer

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