

SECTION 1 - IDENTIFICATION

MANUF / DIST: First Class Detailing Supplies
371 Fox Dr.
Piqua, OH 45356
(937) 230-8488

PREPARER / CONTACT: **First Class Iron**
PREPARER PHONE:
24 HOUR EMERGENCY PHONE: **FOR INDUSTRIAL USE ONLY**

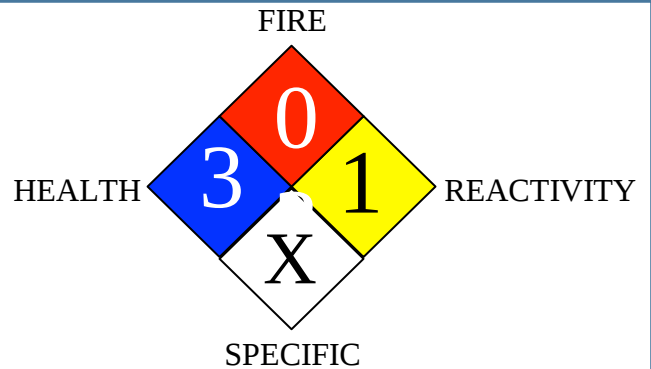
PRODUCT IDENTIFIER
RECOMMENDED USE
FORMULA: PROPRIETARY RESTRICTIONS ON USE: *SEE
PRODUCT CODE: INFORMATION ON THIS SHEET*
INTENDED USE IRON CONTAMINANT REMOVER

SECTION 2 - HAZARDOUS IDENTIFICATION

HAZARDOUS IDENTIFICATION SYSTEM:

HAZARD WARNING

4 - Extreme
3 - High
2 - Moderate
1 - Slight
0 - Insignificant
X- See Section IV & V of SDS Sheet



Signal Word: **DANGER!** FOR HEALTH EFFECTS (Acute and Chronic); SEE SECTION 11

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

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

SECTION 4 - 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.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable extinguishing media:

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

Unsuitable extinguishing media:

water jet

Hazardous combustion products:

nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂)

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.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

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.

Environmental precautions:

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

Advices on how to contain a spill:

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

Appropriate containment techniques:

Use of adsorbent materials.

Other information relating to spills and releases:

Place in appropriate containers for disposal. Ventilate affected area.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling

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.

Conditions for safe storage, including any incompatibilities:

Protect against external exposure, such as:

Frost

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters, National limit values

Occupational exposure limit values (Workplace Exposure Limits):

<u>Coun try</u>	<u>Name of agent</u>	<u>CAS No</u>	<u>Identifier</u>	<u>TWA</u> [ppm]	<u>TWA</u> [mg/m³]	<u>STEL</u> [ppm]	<u>STEL</u> [mg/m³]	<u>Source</u>
<u>EU</u>	<u>2-(2-butoxyethoxy)ethanol</u>	<u>112-34-5</u>	<u>IOELV</u>	<u>10</u>	<u>67.5</u>	<u>15</u>	<u>101.2</u>	<u>2006/15/E</u> <u>C</u>
<u>GB</u>	<u>2-(2-butoxyethoxy)ethanol</u>	<u>112-34-5</u>	<u>WEL</u>	<u>10</u>	<u>67.5</u>	<u>15</u>	<u>101.2</u>	<u>EH40/200</u> <u>5</u>

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:**

<u>Name of sub- stance</u>	<u>CAS No</u>	<u>End- point</u>	<u>Threshold level</u>	<u>Protection goal, route of expos- ure</u>	<u>Used in</u>	<u>Exposure time</u>
<u>sodium thioglycolate solution</u>	<u>367-51-1</u>	<u>DNEL</u>	<u>2.06 mg/kg</u>	<u>human, dermal</u>	<u>worker (in- dustry)</u>	<u>chronic - systemic ef- fects</u>
<u>sodium thioglycolate solution</u>	<u>367-51-1</u>	<u>DNEL</u>	<u>1.41 mg/m³</u>	<u>human, inhalatory</u>	<u>worker (in- dustry)</u>	<u>chronic - systemic ef- fects</u>
<u>diethylene glycol monobutyl ether</u>	<u>112-34-5</u>	<u>DNEL</u>	<u>67.5 mg/m³</u>	<u>human, inhalatory</u>	<u>worker (in- dustry)</u>	<u>chronic - local effects</u>
<u>diethylene glycol monobutyl ether</u>	<u>112-34-5</u>	<u>DNEL</u>	<u>20 mg/kg</u>	<u>human, dermal</u>	<u>worker (in- dustry)</u>	<u>chronic - systemic ef- fects</u>
<u>diethylene glycol monobutyl ether</u>	<u>112-34-5</u>	<u>DNEL</u>	<u>67.5 mg/m³</u>	<u>human, inhalatory</u>	<u>worker (in- dustry)</u>	<u>chronic - systemic ef- fects</u>

Relevant PNECs of components of the mixture:

<u>Name of sub- stance</u>	<u>CAS No</u>	<u>End- point</u>	<u>Threshold level</u>	<u>Organism</u>	<u>Environ- mental com- partment</u>	<u>Exposure time</u>
<u>sodium thioglycolate solution</u>	<u>367-51-1</u>	<u>PNEC</u>	<u>38 µg/l</u>	<u>aquatic organisms</u>	<u>freshwater</u>	<u>short-term (single in- stance)</u>
<u>sodium thioglycolate solution</u>	<u>367-51-1</u>	<u>PNEC</u>	<u>3.8 µg/l</u>	<u>aquatic organisms</u>	<u>marine water</u>	<u>short-term (single in- stance)</u>
<u>sodium thioglycolate solution</u>	<u>367-51-1</u>	<u>PNEC</u>	<u>3.2 mg/l</u>	<u>microorganisms</u>	<u>sewage treat- ment plant (STP)</u>	<u>short-term (single in- stance)</u>
<u>sodium thioglycolate solution</u>	<u>367-51-1</u>	<u>PNEC</u>	<u>380 µg/l</u>	<u>aquatic organisms</u>	<u>water</u>	<u>intermittent release</u>
<u>diethylene glycol monobutyl ether</u>	<u>112-34-5</u>	<u>PNEC</u>	<u>1 mg/l</u>	<u>aquatic organisms</u>	<u>freshwater</u>	<u>short-term (single in- stance)</u>
<u>diethylene glycol monobutyl ether</u>	<u>112-34-5</u>	<u>PNEC</u>	<u>0.1 mg/l</u>	<u>aquatic organisms</u>	<u>marine water</u>	<u>short-term (single in- stance)</u>

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

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.

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

Physical state: liquid

Color: colorless to pale pink

Odor 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

Reactivity:

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

Chemical stability:

See below "Conditions to avoid".

Possibility of hazardous reactions:

No known hazardous reactions.

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

Incompatible materials:

There is no additional information.

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

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 sensitization

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

Toxicity

Harmful 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
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

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.

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

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)	

Mobility in soil

Data are not available.

Results of PBT and vPvB assessment

Data are not available.

Other adverse effects

Data are not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

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.

SECTION 14 - TRANSPORT INFORMATION

UN number:	(not subject to transport regulations)
UN proper shipping name:	Not relevant
Transport hazard class(es):	Class -
Packing group:	Not relevant
Environmental hazards:	None (non-environmentally hazardous acc. to the dangerous goods regulations)
Special precautions for user:	There is no additional information.

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**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 %

Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16 - OTHER INFORMATION

IN CLOSE COOPERATION OF THE US GOVERNMENT'S PAPER REDUCTION ACT, AND ALSO IN EFFORT TO PROVIDE FULL AND COMPLETE INFORMATION AS SUGGESTED BY THE OSHA GUIDELINES, AND KEEPING IN ALIGNMENT WITH THE SOCIETY for CHEMICAL HAZARD COMMUNICATION (SCHC) AND WE HAVE BEEN ABLE TO KEEP ALL IN 4 PAGES..

THESE SDS SHEETS ARE WRITTEN IN AN EFFORT TO PROVIDE INFORMATION TO THE WORKER IN THE WORKPLACE AND IN SUCH A WAY IT CAN BE UNDERSTOOD.

We have enjoyed many compliments as to the readability and understandable content, and take great pride in providing these Safety Data Sheets to the use of our customers.

The International Labour Organization has suggested 16 sections of the sheets, and we have re adjusted the 8 part, and rearranged the information, and renamed the sheets from MATERIAL Safety Data Sheets to SAFETY DATA SHEETS.

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