SAFETY DATA SHEET



according to Workplace Safety and Health Regulations Singapore

Rust Loosener Fluid

Section 1. Identification

Product identifier	:	Rust Loosener Fluid
Product code	:	111540

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

Aerosol product

Supplier's details	: WEICON GmbH & Co. KG Königsberger Str. 255 48157 Münster Germany Phone: +49 251 93220 Fax: +49(0)251 / 9322 - 244 Internet: www.weicon.de
e-mail address of person responsible for this SDS	: msds@weicon.de
Emergency telephone number	: EMERGENCY CONTACT – UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English) TRANSPORT EMERGENCY CONTACT - UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)

Section 2. Hazards identification

Classification of the substance or mixture	: AEROSOLS - Category 1

GHS label elements, including precautionary statements

Hazard pictograms		
Signal word	anger	
Hazard statements	222, H229 - Extremely flammable aerosol. Pressurized container: may burs eated.	st if
Precautionary statements		
Prevention	210 - Keep away from heat, hot surfaces, sparks, open flames and other igr ources. No smoking. 211 - Do not spray on an open flame or other ignition source. 251 - Do not pierce or burn, even after use.	nition
Response	ot applicable.	
Storage	410 + P412 - Protect from sunlight. Do not expose to temperatures exceedi C/122 °F.	ing 50
Disposal	ot applicable.	
Other hazards which do not result in classification	one known.	

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	%	CAS number
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics,<2% aromatics	≥50 - ≤75	1174522-15-6
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	≤0.3	95-38-5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Chemical formula : Not applicable.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Potential acute nealth effects			
Eye contact	No known significant effects or critical hazards.		
Inhalation	No known significant effects or critical hazards.		
Skin contact	No known significant effects or critical hazards.		
Ingestion	No known significant effects or critical hazards.		
Over-exposure signs/symptoms			
Eye contact	Adverse symptoms may include the following: irritation redness		
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing		
Skin contact	No specific data.		
Ingestion	No specific data.		

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments Protection of first-aiders	 No specific treatment. No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containment and cleaning up		
Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

 Protective measures Put on appropriate personal protective equipment (see Section container: protect from sunlight and do not expose to tempe Do not pierce or burn, even after use. Do not ingest. Avoid and clothing. Avoid breathing gas. Avoid breathing vapor or adequate ventilation. Wear appropriate respirator when ven Store and use away from heat, sparks, open flame or any ot explosion-proof electrical (ventilating, lighting and material head)

Section 7. Handling and storage

	Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Section 8. Expos	ure controls/personal protection
Control parameters	
Occupational exposure lin	<u>mits</u>
None.	
Appropriate engineering controls	: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection meas	ures
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Recommended : 1 - 4 hours (breakthrough time): nitrile rubber 4 - 8 hours (breakthrough time): Viton®/butyl rubber
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Date of issue/Date of revision	: 5/11/2023	Date of previous issue	: 9/16/2021	Version : 2.04 4/10
--------------------------------	-------------	------------------------	-------------	---------------------

Section 8. Exposure controls/personal protection

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended : organic vapor (Type AX) and particulate filter

Section 9. Physical and chemical properties

Appearance		
Physical state	Aerosol.	
Color	/ellow.	
Odor	Characteristic.	
Odor threshold	lot available.	
рН	lot applicable.	
Melting point/freezing point	lot available.	
Boiling point, initial boiling point, and boiling range	Not available.	
Flash point	Not applicable.	
Fire point	•200°C (>392°F)	
Evaporation rate	Not available.	
Flammability	Extremely flammable in the presence of the following materials or conditi lames, sparks and static discharge. Highly flammable in the presence of the following materials or conditions:	·
Lower and upper explosion limit/flammability limit	.ower: 0.5% Jpper: 10.9%	
Vapor pressure	210 kPa (1575.1 mm Hg)	
Relative vapor density	lot available.	
Relative density	lot available.	
Density).696 g/cm³ [20°C (68°F)]	
Solubility(ies) Not available.		
Solubility in water	lot available.	
Miscible with water	No.	
Partition coefficient: n- octanol/water	Not applicable.	
Auto-ignition temperature	Not applicable.	
Decomposition temperature	Not available.	
Heat of combustion	3.65 kJ/g	
Viscosity	Not available.	
Flow time (ISO 2431)	Not available.	
Particle characteristics		
Median particle size	Not applicable.	
Aerosol product		
Type of aerosol	Spray	

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.

Date of issue/Date of revision

Section 10. Stability and reactivity

Conditions to avoid	: Avoid all possible sources of ignition (spark or flame).
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SADT	: Not available.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics,<2% aromatics	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the phys	ic	al. chemical and toxicological characteristics
Symptoms related to the phys		ai, chemicai and toxicological characteristics

		-
Eye contact	:	Adverse symptoms may include the following: irritation
		redness

Section 11. Toxicological information

		5
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	:	No specific data.
Ingestion	:	No specific data.
	<u>sts</u>	and also chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>s</u>
Not available.		

General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	500	N/A	N/A	N/A	N/A

Acute toxicity estimates

	ATE value
Not available.	

Section 12. Ecological information

Toxicity

Not available.

Persistence/degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Date of issue/Date of revision

Section 12. Ecological information

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	UN	IMDG	ΙΑΤΑ	ADR/RID	
UN number	UN1950	UN1950	UN1950	UN1950	
UN proper shipping name	AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	
Transport hazard class(es)	2.1	2.1	2.1	2	
Packing group	-	-	-	-	
Environmental hazards	No.	No.	No.	No.	
Additional informat	tion	•	•		
UN	: <u>Special</u>	provisions 63, 190, 23	77, 327, 344, 381		
IMDG		n cy schedules F-D, S provisions 63, 190, 21			
ΙΑΤΑ	: Quantity limitation Passenger and Cargo Aircraft: 75 kg. Packaging instructions: 203. Cargo Aircraft Only: 150 kg. Packaging instructions: 203. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y203. Special provisions A145, A167, A802				
ADR/RID	: <u>Limited quantity</u> 1 L <u>Special provisions</u> 190, 327, 625, 344 <u>Tunnel code</u> (D) <u>ADR Classification Code:</u> 5F				
Special precautions	upright a	nd secure. Ensure that	within user's premises: always transport in closed containers that are secure. Ensure that persons transporting the product know what to do in f an accident or spillage.		
Transport in bulk ac to IMO instruments	cording : Not available.				

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list		
Australia		Not determined.
Canada	:	Not determined.
China	:	Not determined.
Eurasian Economic Union	:	Russian Federation inventory: Not determined.
Japan	:	Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.
New Zealand	:	Not determined.
Philippines	:	Not determined.
Republic of Korea	:	Not determined.
Taiwan	:	Not determined.
Thailand	:	Not determined.
Turkey	:	Not determined.
United States	:	Not determined.
Viet Nam	:	Not determined.

Section 16. Other information

<u>History</u>	
Date of printing	: 5/14/2023
Date of issue/Date of revision	: 5/11/2023
Date of previous issue	: 9/16/2021
Version	: 2.04
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations
Procedure used to derive	the classification

Procedure used to derive the classification

Date of issue/Date of revision	: 5/11/2023	Date of previous issue	: 9/16/2021	Version : 2.04 9/	/10

Section 16. Other information

Classification	Justification
AEROSOLS - Category 1	On basis of test data

References

: Not available.

V Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.