SAFETY DATA SHEET



according to Workplace Safety and Health Regulations Singapore

Metal-Fluid

Section 1. Identification

Product identifier	: Metal-Fluid
Product code	: 155800

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

Washing and cleaning products

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 : Not classified. substance or mixture

GHS label elements, including precautionary statements

Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.

Other hazards which do not : None known. result in classification

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	%	CAS number
Alcohols, C16-18 and C18-unsatd., ethoxylated propoxylated	≤5	677026-24-3

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. Get medical attention if symptoms occur. Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. : Wash out mouth with water. If material has been swallowed and the exposed Ingestion person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health eff	fects			
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				

-exposure signs/symptoms

Eye contact	:	No specific data.
Inhalation	:	No specific data.
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	: No specific treatment.
Protection of first-aiders	: 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	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: No specific data.
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.
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. Do not touch or walk through spilled material. 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. 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	g	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8).
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 in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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 measure	s	
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.

Section 8. Exposure controls/personal protection

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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. 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.
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.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.

Section 9. Physical and chemical properties

Appearance

Physical state: Liquid.Color: White.Odor: Characteristic.Odor threshold: Characteristic.Odor threshold: Not available.pH: 11.4Melting point/freezing point: Not available.Boiling point, initial boiling point, and boiling range: Closed cup: >100°C (>212°F)Fire point: Closed cup: >100°C (>212°F)Fire point: Not available.Evaporation rate: Not available.Flammability: Not available.Lower and upper explosion limit/flammability limit: Not available.			
Odor: Characteristic.Odor threshold: Not available.pH: 11.4Melting point/freezing point: Not available.Boiling point, initial boiling point, and boiling range: 100°C (212°F)Flash point: Closed cup: >100°C (>212°F)Fire point: >200°C (>392°F)Evaporation rate: Not available.Flammability: Not available.Lower and upper explosion: Not available.	Physical state	:	Liquid.
Odor threshold:Not available.pH:11.4Melting point/freezing point:Not available.Boiling point, initial boiling point, and boiling range:100°C (212°F)Flash point:Closed cup: >100°C (>212°F)Fire point:>200°C (>392°F)Evaporation rate:Not available.Flammability:Not available.Lower and upper explosion:Not available.	Color	:	White.
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Flammability: Not available.Lower and upper explosion: Not available.	Fire point	:	>200°C (>392°F)
Lower and upper explosion : Not available.	Evaporation rate	:	Not available.
•• •	Flammability	:	Not available.
		:	Not available.

Vapor pressure

	Vapor Pressure at 20°C			Vapor pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
water	23.8	3.2				
HIGHLY REFINED BASE OILS Viscosity ≤ 20.5 mm²/s at 40°C	0.08	0.011	OECD 104			
2,2'-iminodiethanol	<0.01	<0.0013				
Relative vapor density	: Not ava	ailable.		·		
Relative density	: Not ava	ailable.				
Density	: 0.94 g/	cm³ [20°C (6	68°F)]			
Solubility(ies) Not available.	:					
Solubility in water	: Not ava	ailable.				
liscible with water	: Yes.					
Partition coefficient: n- octanol/water	: Not ap	plicable.				
Auto-ignition temperature	: Not ap	olicable.				

Date of issue/Date of revision

: 10/20/2022 Date of previous issue

: 10/19/2022

Section 9. Physical and chemical properties

Decomposition temperature	:	Not available.
Viscosity	:	Not available.
Flow time (ISO 2431)	:	Not available.
Particle characteristics		
Median particle size	:	Not applicable.

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.			
Conditions to avoid	: No specific data.			
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

Not available.

Section 11. Toxicological information

Information on the likely	:	Not available.
routes of exposure		
Potential acute health effects		
Evo contact		No known aignifiaant offa

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 physical, chemical and toxicological characteristics

Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health effe	ects
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

N/A

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence/degradability

Not available.

Bioaccumulative potential

Section 12. Ecological information

Not available.

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

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 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA	ADR/RID	
UN number	Not available.	Not available.	Not available.	Not available.	
UN proper shipping name	Not available.	Not available.	Not available.	Not available.	
Transport hazard class(es)	Not available.	Not available.	Not available.	Not available.	
Packing group	-	-	-	-	
Environmental hazards	No.	No.	No.	No.	

Additional information

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to IMO instruments

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

Section 15. Regulatory information

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	: 10/20/2022
Date of previous issue	: 10/19/2022
Version	: 1.03
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

Classification	Justification
Not classified.	

References

: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Other information

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.