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SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Cooling liquid

Product name : MOTOCOOL FACTORY LINE Product code : 43900

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

1.3. Details of the supplier of the safety data sheet

Registered company name : MOTUL Address : 119, Boulevard Felix Faure. 93300 AUBERVILLIERS CEDEX FRANCE Telephone : 33.1.48.11.70.00. Fax: 33.1.48.33.28.79. Telex: . Email : motul_hse@motul.fr

1.4. Emergency telephone number : +44 (0) 1235 239 670.

Association/Organisation : ORFILA.

Other emergency numbers

BRAZIL : +55 11 3197 5891 / COLOMBIA : +57 1 508 7337 / ARGENTINA : +54 11 5984 3690 / CHILE : +562 2582 9336 UNITED STATES: 001 866 928 0789 / CANADA: 001 800 579 7421 / MEXICO : +52 55 5004 8763 / MIDDLE EAST - AFRICA : +44 1235 239671

Ireland : +353 1 8092566

24 hours a day, 7 days a week

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Specific target organ toxicity (repeated exposure), Category 2 (STOT RE 2, H373).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



Signal Word : WARNING	
Product identifiers :	
EC 203-473-3	ETHYLENE GLYCOL
Hazard statements :	
H373	May cause damage to organs through prolonged or repeated exposure (kidneys) (if swallowed).
Precautionary statements - G	General :
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
Precautionary statements - R	lesponse :
P314	Get medical advice/attention if you feel unwell.
Precautionary statements - D	isposal :
P501	Dispose of contents / container in accordance with local / regional / national /
	international regulations

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contains substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
CAS: 107-21-1	GHS07, GHS08	[1]	50 <= x % < 100
EC: 203-473-3	Wng		
REACH: 01-2119456816-28	Acute Tox. 4, H302		
	STOT RE 2, H373		
ETHYLENE GLYCOL			

Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 107-21-1		oral: ATE = 1600 mg/kg BW
EC: 203-473-3		
REACH: 01-2119456816-28		
ETHYLENE GLYCOL		

Information on ingredients :

(Full text of H-phrases: see section 16)

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

In the event of exposure by inhalation :

Remove the victim to fresh air. If the symptoms persist, call a physician.

In the event of splashes or contact with eyes :

Wash immediately and abundantly with water, including under the eyelids.

In the event of splashes or contact with skin :

Immediately remove all soiled clothing.

Wash immediately and abundantly with soap and water.

In the event of swallowing :

Seek medical attention, showing the label.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

Drv agent, foam, carbon dioxide.

Unsuitable methods of extinction

High volume water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8. Spilled product may make surfaces slippery.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

- To be translated (XML)
- Do not swallow

Do not get in eyes, on skin, or on clothing.

Fire prevention :

Prevent access by unauthorised personnel.

Take precautionary measures against static discharges by bonding and grounding equipment. No smoking.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations. Avoid exposure - obtain special instructions before use.

Ensure good ventilation at the workplace

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used. Do not breathe fumes, vapour, spray.

7.2. Conditions for safe storage, including any incompatibilities

Store between $5^{\circ}C$ and $40^{\circ}C$ in a dry, well ventilated place.

Only use hydrocarbon-resistant containers, joints and pipes.

Keep out of reach of children.

Storage Storage

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- European Union (2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
107-21-1	52	20	104	40	Peau
- ACGIH TLV (A	American Conference	of Governmental Ind	ustrial Hygienists, Th	reshold Limit Values,	2010) :
CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
107-21-1	-	-	100	-	-

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AS	- AGW (BAuA - TRG VME :	VME :	Excess	Notes			
07-21-1	V IVIL .	10 ppm	LA0000	2(I)			
		26 mg/m ³		-(')			
,	NRS - ED984 / 2020-	,					
AS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :	
07-21-1	20	52	40	104	*	84	-
		e limits, EH40/2005, F			O uite ui e		
AS 07-21-1	TWA :	STEL :	Ceiling :	Definition : Sk	Criteria :		
07-21-1	20 ppm 52 mg/m³	40 ppm 104 mg/m ³		SK			
Derived no 6	0	r derived minimum e	ffect level (DMFL):				
	NE GLYCOL (CAS: 10						
Final use	· ·	7-21-1)	Workers				
Exposure			Dermal contact.				
•	health effects:		Long term syste				
DNEL :	nealth Ellecis.		106 mg/kg body				
DINEL .			roo mg/kg body	weigilivuay			
Exposure	method:		Inhalation.				
•	health effects:		Long term syste	emic effects.			
DNEL :			35 mg of substa				
Final use	e:		Consum				
Exposure	method:		Dermal contact.				
Potential	health effects:		Long term syste	emic effects.			
DNEL :			53 mg/kg body	weight/day			
Exposure	method.		Inhalation.				
•	health effects:		Long term syste	emic effects			
DNEL :			7 mg of substar				
			0				
Predicted no	o effect concentratio	n (PNEC):					
ETHYLEN	NE GLYCOL (CAS: 10	7-21-1)					
Environm	ental compartment:		Soil.				
PNEC :			1.53 mg/kg				
	ental compartment:		Fresh water.				
PNEC :			10 mg/l				
Environm	ental compartment:		Sea water.				
PNEC :	ental comparanent.		1 mg/l				
Environm	ental compartment:		Intermittent was	te water.			
PNEC :			10 mg/l				
_							
	ental compartment:		Fresh water sec	liment.			
PNEC :			37 mg/kg				
Environm	ental compartment:		Marine sedimer	ıt			
PNEC :	ontai comparanent.		3.7 mg/kg	it.			
			5 mana				
Environm	ental compartment:		Waste water tre	atment plant.			
Environini							

Appropriate engineering controls

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction. Personnel shall wear regularly laundered overalls.

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area. Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas. - Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Natural latex

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)

- Butyl Rubber (Isobutylene-isoprene copolymer)

Glove 0.38 mm

time:	
Break-through	> 480 mn
UIICKIIE55.	

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Breathing apparatus only when aerosol or spray are formed.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

2	Physical state				
I	Physical state :	Fluid liquid.			
2	Colour				
(Color:	red			
2	Odour				
(Odour threshold :	Not stated.			
₹ي	Freezing point				
I	Freezing point / Freezing range :	Not stated.			
2	Boiling point or initial boiling point and boiling range				
i	Boiling point/boiling range :	109 °C.			
2	Flammability				
I	Flammability (solid, gas) :	Not stated.			
2	Lower and upper explosion limit				
I	Explosive properties, lower explosivity limit (%) :	NC			
I	Explosive properties, upper explosivity limit (%) :	NC			
2	Flash point				
I	Flash point interval :	Not relevant.			
2	Auto-ignition temperature				
\$	Self-ignition temperature :	Not relevant.			
2	Decomposition temperature				
I	Decomposition point/decomposition range :	Not relevant.			
2	рН				
ł	pH :	8.50 .			

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	Slightly basic.
pH (aqueous solution) :	Not stated.
Kinematic viscosity	
Viscosity :	Not stated.
Solubility	
Water solubility :	Soluble.
Fat solubility :	Not stated.
Partition coefficient n-octanol/water (log value)	
Partition coefficient: n-octanol/water :	NC
Vapour pressure	
Vapour pressure (50°C) :	Below 110 kPa (1.10 bar).
Density and/or relative density	
Density :	1.0709
Relative vapour density	
Vapour density :	Not stated.
9.2. Other information	

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid :

- frost

Keep away from heat and from sources of ignition

Take precautionary measures against static discharges.

10.5. Incompatible materials

Strong oxidants

Acids

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO2)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

May cause severe damage to organs in the event of repeated or prolonged exposure.

11.1.1. Substances

Acute toxicity :

ETHYLENE GLYCOL (CAS: 107-21-1)	
Oral route :	LD50 = 1600 mg/kg Species : Cat
Dermal route :	LD50 > 3500 mg/kg

LD50 > 3500 mg/kg Species : Rat

Inhalation route (Vapours) :

LC50 2.5 Species : Rat

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	Specific target organ systemic toxicity - repeated e ETHYLENE GLYCOL (CAS: 107-21-1)	exposure :	
	Oral route :	150 < C <= 300 mg/kg body weight/da	у
		Duration of exposure : 28 days	
	11.1.2. Mixture		
	Acute toxicity :		
	Oral route :	No observed effect. LD50 = 3189 mg/kg	
	Skin corrosion/skin irritation :		
	Repeated or prolonged contact with the preparation absorption through the skin.	may cause removal of natural fat from the s	skin resulting in non allergic contact dermatitis an
	Serious damage to eyes/eye irritation :		
	Mild eye irritation		
	Aspiration hazard :		
	"Inhalation of vapours may cause irritation of the res	piratory system in very susceptible persons	
	May cause lung damage if swallowed		
S	ECTION 12 : ECOLOGICAL INFORMATION		
	12.1. Toxicity		
	12.1.1. Substances		
	ETHYLENE GLYCOL (CAS: 107-21-1)		
	Fish toxicity :	LC50 = 18000 mg/l	
		Species : Oncorhynchus mykiss	
		Duration of exposure : 96 h	
	Crustacean toxicity :	EC50 = 100 mg/l	
		Species : Daphnia magna	
		Duration of exposure : 48 h	
	Algae toxicity :	ECr50 < 13000 mg/l	
		Species : Selenastrum capricornutum	
		Duration of exposure : 96 h	
	12.1.2. Mixtures		
	No aquatic toxicity data available for the mixture.		
	12.2. Persistence and degradability		
	12.2.1. Substances		
	ETHYLENE GLYCOL (CAS: 107-21-1)		
	Biodegradability :	no degradability data is available, the degrading quickly.	substance is considered as not
	12.3. Bioaccumulative potential		
	No data available.		
	12.4. Mobility in soil		
	Water soluble		
	Mobile in soil		
	12.5. Results of PBT and vPvB assessment		
	No data available.		
	12.6. Endocrine disrupting properties		
	No data available.		
	12.7. Other adverse effects		
	Do not dispose of the product in the natural environ	ment, effluents or surface waters.	
	German regulations concerning the classification	of nazards for water (WGK. AWSV vom 12	3/04/2017, KBWS):

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number or ID number

14.2. UN proper shipping name

- 14.3. Transport hazard class(es)
- 14.5. Transport hazard class(
- 14.4. Packing group

- 14.5. Environmental hazards
- 14.6. Special precautions for user

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

- Classification and labelling information included in section 2:

- The following regulations have been used:
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2018/1480 (ATP 13)
- Container information:

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

- Particular provisions :
 - No data available.
- German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) : WGK 1 : Slightly hazardous for water.
- 15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

2	Abbreviations :	
	H373	May cause damage to organs through prolonged or repeated exposure .
	H302	Harmful if swallowed.

Abbreviations :

 $\mathsf{LD50}$: The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

 $\mathsf{EC50}$: The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

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REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances. ATE : Acute Toxicity Estimate BW : Body Weight DNEL : Derived No-Effect Level PNEC : Predicted No-Effect Concentration STEL : Short-term exposure limit TWA : Time Weighted Averages TMP : French Occupational Illness table TLV : Threshold Limit Value (exposure) AEV : Average Exposure Value. ADR : European agreement concerning the international carriage of dangerous goods by Road. IMDG : International Maritime Dangerous Goods. IATA : International Air Transport Association. ICAO : International Civil Aviation Organisation RID : Regulations concerning the International carriage of Dangerous goods by rail. WGK : Wassergefahrdungsklasse (Water Hazard Class). GHS08 : Health hazard

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.