MATERIAL SAFETY DATA SHEET

1. Chemical product and company identification

A. Product name **CIMSTAR® 585**

METALWORKING FLUID

Other means of identification

SDS number Not applicable

Product code A30377

B. Recommended use and Limitations on use

Recommended use METALWORKING FLUID

Product use METALWORKING FLUID

C. Supplier information

Manufacturer

Company name CIMCOOL® Korea Inc

Address 255,Gongdan-ro,Onsan-eup,Ulju-gun,Ulsan,Korea

Telephone +82-52-239-2333

Emergency telephone number (Korea) 003-0813-2549

MSDS number Not applicable

2. Hazards identification

A. Hazard category/Classification

Physical hazards	Not classified.	
Health hazards	Skin irritation	Category 2
	Eye irritation	Category 2
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

B. Warning label items including precautionary statement

• Pictogram

• Signal word Warning

• Hazard statement

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

• Precautionary statement

Prevention

P264	Wash thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302 + P352	IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

Storage Store away from incompatible materials.

Disposal

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

C. Other hazards not included in the hazard category criteria (e.g. dust explosion hazard) None known.

Supplemental information 2% of the mixture consists of component(s) of unknown acute oral toxicity. 7.19% of the mixture consists of component(s) of unknown acute dermal toxicity. 25.49% of the mixture consists of component(s) of unknown acute inhalation toxicity. 5.19% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

The classified hazards shown on this SDS are associated with the product concentrate. These hazards are not expected under recommended use conditions and dilution.

3. Composition/information on ingredients

Chemical identity	Common and alternative names	CAS number	ID number	Content in percent (%)
WATER		7732-18-5	KE-35400	40
LINEAR ALKYLBENZENE SULPHONATE		68411-30-3	KE-02606	20
DISTILLATES, (PETROLEUM)		64742-52-5 / 64742-55-8	KE-12543	20
CHLORINATED PARAFFINS, C14-17		63449-39-8	KE-05480	10
MONOISOPROPANOLAMINE		78-96-6	KE-25506	5
MONOETHANOLAMINE		141-43-5	KE-20493	3
N,N'-METHYLENEBISMORPHOLINE		5625-90-1	KE-23843	2

4. First aid measures

A. In case of eye contact Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

B. In case of skin contact Rinse skin with water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

C. In case of inhalation Move to fresh air. Call a physician if symptoms develop or persist. Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

D. In case of swallowing Rinse mouth thoroughly. Drink 1 or 2 glasses of water. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

E. Note to physician Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

Most important symptoms/effects, acute and delayed Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation.

General advice If exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

A. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Not applicable, non-combustible.

B. Specific hazards arising from the chemical (example: hazardous combustion products) During fire, gases hazardous to health may be formed.

C. Specific methods of fire-fighting

Special protective equipment for firefighters Wear suitable protective equipment.

Special fire fighting procedures Move containers from fire area if you can do so without risk.

General fire hazards No unusual fire or explosion hazards noted.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency measures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the MSDS.

B. Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

C. Methods and materials for containment and cleaning up

Local authorities should be advised if significant spillages cannot be contained. This product is miscible in water. Prevent entry into waterways, sewer, basements or confined areas. Clean up in accordance with all applicable regulations.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the MSDS.

7. Handling and storage

A. Precautions for safe handling

Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

B. Conditions for safe storage (including any incompatibilities)

Store in tightly closed container. If frozen, product may separate. Thaw completely at room temperature and stir thoroughly prior to use. Store away from incompatible materials (see Section 10 of the MSDS).

8. Exposure controls/personal protection

A. Exposure limit values, biological limit values, etc

Korea. OELs. Standards for Exposure to Chemical Substances and Physically Hazardous Factors

Components	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm
	TWA	3 ppm

ACGIH

Components	Type	Value
DISTILLATES, (PETROLEUM)	TWA	5 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm
	TWA	3 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

B. Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

C. Personal protective equipment

- **Respiratory protection** — In case of insufficient ventilation, wear suitable respiratory equipment.
- **Eye protection** — Do not get in eyes. Wear safety glasses with side shields (or goggles). Eye wash fountain is recommended.
- **Hand protection** — Nitrile gloves are recommended.
- **Body protection** — Wear appropriate chemical resistant clothing.

Hygiene measures	When using, do not eat, drink or smoke. Do not get in eyes, on skin, on clothing. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

A. Appearance	CLEAR
Physical state	Liquid.
Form	Liquid.
Color	Not available.
B. Odor	CHEMICAL
C. Odor threshold	Not available.
D. pH	9.5
E. Melting point/freezing point	
Freezing point	< 32 °F (< 0 °C) estimated
F. Boiling point, initial boiling point, and boiling range	> 212 °F (> 100 °C) estimated
G. Flash point	Not Applicable
H. Evaporation rate	Like water when diluted
I. Flammability (solid, gas)	Not applicable.
J. Upper/lower limit on flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
K. Vapor pressure	Not available.
L. Solubility	
Solubility (water)	100 % Water Miscible
M. Vapor density	Not available.
N. Specific gravity	1.027
O. n-octanol/water partition coefficient	Not available.
P. Auto-ignition temperature	Not available.
Q. Decomposition temperature	Not available.
R. Viscosity	Not available.
S. Molecular weight	Not available.
Other data	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	9.2 @ 5%

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
A. Stability and hazardous reaction potential	
Stability	Material is stable under normal conditions.
Hazardous reaction potential	No dangerous reaction known under conditions of normal use.
B. Conditions to avoid (e.g. static discharge, shock or vibration, etc)	Contact with incompatible materials.
C. Incompatible materials	Acids. Oxidizing agents. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines.
D. Hazardous decomposition products	Smoke, fumes, oxides of nitrogen, hydrogen chloride, and oxides of carbon

11. Toxicological information

A. Information on likely routes of exposure

• Respiratory organs	Based on available data, the classification criteria are not met.
• Skin	Causes skin irritation.
• Eyes	Causes serious eye irritation.
• Mouth	Knowledge about health hazard is incomplete.

B. Information on health hazards

• Acute toxicity (list all possible routes of exposure)

Components	Species	Test Results
CHLORINATED PARAFFINS, C14-17 (CAS 85535-85-9)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg
Oral		
LD50	Rat	> 2000 mg/kg
DISTILLATES, (PETROLEUM)		
Acute		
Dermal		
Liquid		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
Mist		
LC50	Rat	5.7 mg/l, 4 hr
Oral		
Liquid		
LD50	Rat	> 5000 mg/kg
MONOISOPROPANOLAMINE (CAS 78-96-6)		
Acute		
Dermal		
LD50	Rabbit	1560 mg/kg
Oral		
LD50	Rat	1715 mg/kg
N,N'-METHYLENEBISMORPHOLINE (CAS 5625-90-1)		
Acute		
Oral		
Liquid		
LD50	Rat	500 - 2000 mg/kg

• Corrosivity or irritation to the skin	Causes skin irritation.
• Serious eye damage/eye irritation	Causes serious eye irritation.
• Respiratory sensitization	Not a respiratory sensitizer.
• Skin sensitization	This product is not expected to cause skin sensitization.
• Carcinogenic properties /Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Oil /Distillate meets the EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346.
• Mutagenic properties /Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
• Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
• Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.

• Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
• Aspiration hazard	Not an aspiration hazard.

12. Ecological information

A. Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components		Species	Test Results
CHLORINATED PARAFFINS, C14-17 (CAS 85535-85-9)			
Aquatic			
Acute			
Crustacea	EC50	Daphnia magna	0.006 mg/l, 48 hours
Fish	LC50	Fish	> 5000 mg/l, 96 hours
MONOETHANOLAMINE (CAS 141-43-5)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	114 - 196 mg/l, 96 hours
Acute			
Crustacea	EC50	Daphnia	65 mg/l, 48 hours ECHA
MONOISOPROPANOLAMINE (CAS 78-96-6)			
Aquatic			
Crustacea	EC50	Crustacea	108.82 mg/l, 48 hours
Fish	LC50	Goldfish (Carassius auratus)	210 mg/l, 96 hours
N,N'-METHYLENEBISMORPHOLINE (CAS 5625-90-1)			
Aquatic			
Acute			
Crustacea	EC50	Daphnia magna	24 mg/l, 48 hours
Fish	LC50	Fish	> 100 mg/l, 96 hours

Hazardous to the aquatic environment, acute hazard	Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term hazard	Very toxic to aquatic life with long lasting effects.

B. Persistence/degradability No data is available on the degradability of this product.

C. Bioaccumulative potential

Octanol/water partition coefficient log Kow

CHLORINATED PARAFFINS, C14-17	7, @ 20°C
MONOETHANOLAMINE	-1.31

D. Mobility in soil This product is miscible in water.

E. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

A. Method of disposal	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
B. Disposal considerations (including disposal of contaminated containers or packaging)	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

14. Transport information

IATA

A. UN number	UN3082
B. UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (CHLORINATED PARAFFINS, C14-17)
C. Transport hazard class(es)	
Class	9

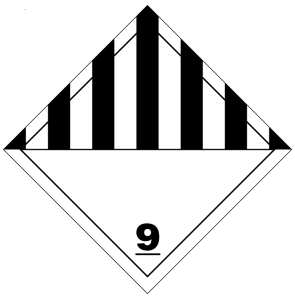
Subsidiary risk	-
D. Packing group	III
E. Environmental hazards	Yes
ERG Code	9L
F. Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

A. UN number	UN3082
B. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CHLORINATED PARAFFINS, C14-17), MARINE POLLUTANT
C. Transport hazard class(es)	
Class	9
Subsidiary risk	-
D. Packing group	III
E. Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-F
F. Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

IATA; IMDG



Marine pollutant

General information IMDG Regulated Marine Pollutant.

15. Regulatory information

A. Restrictions under the Industrial Safety and Health Law

Harmful Substances Prohibited from Manufacturing

Not regulated.

Harmful Substances Requiring Permission for Manufacture or Use

Not regulated.

Controlled Hazardous Substances

MONOETHANOLAMINE (CAS 141-43-5)

Harmful Substances Requiring Special Medical Examination

Not regulated.

Workplace Environmental Monitoring Harmful Materials

MONOETHANOLAMINE (CAS 141-43-5)

Occupational Exposure Limit

MONOETHANOLAMINE (CAS 141-43-5)

B. Restrictions under the Chemicals Control Law (Previously Toxic Chemicals Control Law)

Accidental Release Prevention Substances

Not regulated.

Act on the Registration and Evaluation of Chemicals

Banned Toxic Chemicals

Not regulated.

Designated Existing Chemicals Subject to Registration (PEC) (MoE No. 2015-92)

CHLORINATED PARAFFINS, C14-17 (CAS 85535-85-9)

Restricted Chemical Substances

Not regulated.

Toxic Chemicals

Not regulated.

C. Restrictions under the Dangerous Substance Safety Management Act

Not dangerous goods under the Dangerous Substance Safety Management Law

D. Restrictions under the Wastes Control Act

Halogenated Materials in Waste Organic Solvents

Not regulated.

Hazardous Substances

Not regulated.

E. Restrictions under other foreign or domestic laws

Clean Air Conservation Act

Air Pollutants

Not regulated.

Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides (Rules on PIC, MoE No. 2014-252, Dec. 31, 2014; Standards for Pesticides, RDA No. 2014-26), as amended

Not listed.

Specific Air Pollutants

Not regulated.

Further information This material safety data sheet was prepared in accordance with Article 41 of the Industrial Safety and Health Law.

Inventory status

Country(s) or region	Inventory name	On inventory or exempt (yes/no)*
Korea	Existing Chemicals List (ECL)	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information

A. Source of information

ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents
Korea. Accidental Release Prevention Substances (Presidential Decree of Toxic Chemical Control Law, Executive Order No. 19203)
Korea. Dangerous Substances Threshold Quantity (Presidential Decree of Dangerous Substances Safety Management Act No. 18406, Schedule 1)
Korea. Harmful Substances Prohibited from Manufacturing (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 29)
Korea. Harmful Substances Requiring Permission for Manufacture or Use (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 30)
Korea. OELs. Regulation for Permitted Concentration of Hazardous Substances (Ministry of Labor (MOL) Public Notice No. 1986-45, as amended)
Korea. Prohibited Chemical Substances (TCCL Article 11)
Korea. Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001, as amended)
Korea. Restricted Chemical Substances (TCCL Article 11)
Korea. Toxic Chemical Control Law (TCCL), Existing Chemicals Inventory (KECI)
Korea. Toxic Chemical Control Law (TCCL), pre-1997 List
Korea. Toxic Chemicals (TCCL Article 10)
Korea. Toxic Release Inventory (TRI) Chemicals (TCCL Article 14)
Korea. Accidental Release Prevention Substances (Pres. Decree of Toxic Chemical Control Law, Ex. Order No. 19203, Tables 2 & 3, Dec 28, 2005)
Korea. OELs (ISHL Article 42; MOL Public Notice No. 1986-45, as amended through MOEL Notice 2013-38, August 14, 2013)
Korea. Prohibited Chemical Substances (AREC "K-REACH" Article 27; Designation of Toxic, Restricted or Banned Chemicals Appendices 4 and 5)
Korea. Restricted Chemical Substances (AREC "K-REACH" Article 27; Designation of Toxic, Restricted or Banned Chemicals Appendices 2 and 3)
KECI, January 27, 2015, amended through MoE 2016-138, July 13, 2016
Korea. Toxic Chemicals (AREC "K-REACH" Article 20; Designation of Toxic, Restricted or Banned Chemicals Appendix 1)
Korea. Toxic Release Inventory (TRI) Chemicals (MOE Public Notice No. 2002-166, Nov. 8, 2002)

B. Issue date

08-09-2013

C. Number of revisions and date of most recent revision

03-20-2025 (09 revision)

D. Other

Not available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information

Physical & Chemical Properties: Multiple Properties