

1. Chemical and company identification

Name of chemical (Product name) **CoolPAK™ S5406**

Manufacturer

Company name Master Fluid Solutions

Address 501 West Boundary
 Perrysburg, Ohio 43551-1200
 United States

Telephone 419-874-7902

Website www.masterfluidsolutions.com

E-mail info@masterchemical.com

Emergency phone number CHEMTREC 1-800-424-9300

Recommended use of the chemical and restrictions on use

Intended use Metal working fluids

Restrictions on use Applicable for industrial settings only. No other uses are advised.

2. Hazards identification

GHS classification

Physical hazards The product is not classified according to GHS.

Health hazards Skin corrosion/irritation Category 2
 Serious eye damage/eye irritation Category 2A

Environmental hazards The product is not classified according to GHS.

GHS label elements

Symbols



Signal words Warning

Hazard statement Causes skin irritation. Causes serious eye irritation.

Precautionary statement

Prevention Wash hands thoroughly after handling. Wear eye protection/face protection. Wear protective gloves.

Response If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage Store away from incompatible materials.

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

Other hazards which do not result in classification None known.

Supplemental information

None.

Main symptoms and emergency overview

Emergency overview Causes serious eye irritation. Causes skin irritation.

3. Composition/information on ingredients

Substance or mixture Mixture

Components	CAS Number	Gazette notification		Concentration (%)
		ENCS No.	ISHL No.	
SEVERELY HYDROTREATED PETROLEUM OIL	64742-52-5	(9)-1692	(9)-1692	25 - 30
TRADE SECRET	Proprietary	Proprietary	Proprietary	5 - 10
CHLORINATED PARAFFIN	61788-76-9	(2)-71	(2)-71	6.4
AMINE BORATE	26038-87-9	(2)-301	(2)-301	5.6

	Gazette notification			
	CAS Number	ENCS No.	ISHL No.	Concentration (%)
MONOETHANOLAMINE	141-43-5	(2)-301	(2)-301	3.7
ALCOHOLS, C12-13, ETHOXYLATED	66455-14-9	(7)-97	(7)-97	3.0
TRADE SECRET	Proprietary	Proprietary	Proprietary	<= 5
TRADE SECRET	Proprietary	Proprietary	Proprietary	<= 5
TRADE SECRET	Proprietary	Proprietary	Proprietary	<= 5
DICYCLOHEXYLAMINE	101-83-7	(3)-2259, (3)-2686	(3)-2259, (3)-2686	1.7
ALKANOLAMINE	61791-26-2	(7)-60	(7)-60	1.0
Other components below reportable levels				40 - 45

4. First aid measures

If inhaled	Move to fresh air.
IF ON SKIN	Wash affected area with mild soap and water.
IF IN EYES	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses.
If swallowed	In the unlikely event of swallowing contact a physician or poison control centre.
Most important symptoms/effects, acute and delayed	None known.
Protection of first-aid responders	Get medical attention, if needed.
Notes to physician	Provide general supportive measures and treat symptomatically.

5. Fire-fighting measures

Extinguishing media	Dry chemical, CO ₂ , water spray or alcohol resistant foam. Use fire-extinguishing media appropriate for surrounding materials.
Extinguishing media to avoid	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards	No unusual fire or explosion hazards noted.
Special fire fighting procedures	Containers should be cooled with water to prevent vapour pressure build up.
Protection of fire-fighters	Wear suitable protective equipment. Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency measures	Keep unnecessary personnel away. For personal protection, see section 8. Use personal protective equipment as required.
Environmental precautions	Prevent entry into waterways, sewer, basements or confined areas.
Methods or materials for containment and cleaning up	Soak up with inert absorbent material. Clean up in accordance with all applicable regulations.

7. Handling and storage

Handling	
Technical measures (e.g. Local and general ventilation)	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
Safe handling advice	Follow precautions for safe handling described in this safety data sheet.
Storage	
Safe storage conditions	Store in a dry place. The product is stable and non-reactive under normal conditions of use, storage and transport. Store in a closed container.
Safe packaging materials	Follow precautions for safe handling described in this safety data sheet.

8. Exposure controls/personal protection

Occupational exposure limits

Japan. OELs - JSOH (Japan Society of Occupational Health: Recommendation of Occupational Exposure Limits)

Components	Type	Value	Form
MONOETHANOLAMINE (CAS 141-43-5)	TWA	7.5 mg/m ³	
SEVERELY HYDROTREATED PETROLEUM OIL (CAS 64742-52-5)	TWA	3 ppm 3 mg/m ³	Mist.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
MONOETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm	
	TWA	3 ppm	
SEVERELY HYDROTREATED PETROLEUM OIL (CAS 64742-52-5)	TWA	5 mg/m ³	Inhalable fraction.

Engineering measures

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Eye wash fountain and emergency showers are recommended.

Personal protective equipment

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

Hand protection Wear appropriate chemical resistant gloves.

Eye protection Safety glasses.

Skin and body protection Wear appropriate chemical resistant clothing.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Colour Amber

Odour Mild amine

pH 10 - 10.5

Melting point/freezing point -10 °C (14 °F)

Boiling point, initial boiling point, and boiling range 98.3 °C (208.94 °F)

Flash point > 93.3 °C (> 199.9 °F)

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapour pressure Not available.

Vapour density Not available.

Evaporation rate < 1 BuAc

Specific gravity 0.996 - 1.006

Solubility(ies)

Solubility (water) Soluble

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature	Not available.
Viscosity (Coefficient of viscosity)	Not available.
Other information	
Flash point class	ASTM D93-08
pH in aqueous solution	9.4 - 10

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Conditions to avoid	Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines.
Incompatible materials	Strong acids. Powerful oxidizers.
Hazardous decomposition products	To avoid thermal decomposition, do not overheat.

11. Toxicological information

Acute toxicity	Not classified.
Skin corrosion/irritation	May be irritating to the skin.
Serious eye damage/eye irritation	May be irritating to eyes.
Respiratory or skin sensitisation	
Respiratory sensitisation	Not available.
Skin sensitisation	This product is not expected to cause skin sensitisation.
Germ cell 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.

12. Ecological information

Ecotoxicity	Not available.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulation	No data available.
Mobility in soil	No data available for this product.
Hazardous to the ozone layer	Not available.
Other hazardous 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

Dispose in accordance with all applicable regulations.

Residual waste	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Follow precautions for safe handling described in this safety data sheet.
Local disposal regulations	Dispose of contents/container in accordance with local/regional/national/international regulations.

14. Transport information

CNDG

Not regulated as dangerous goods.

IATA

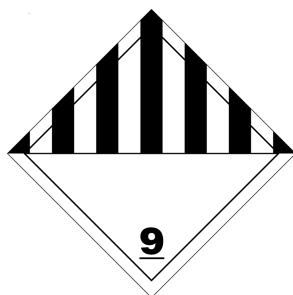
Not regulated as dangerous goods.

IMDG

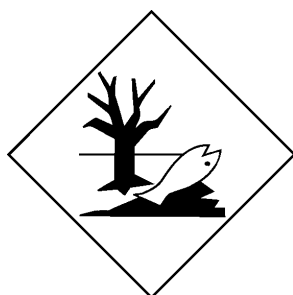
UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (ALKANES, C14-16, CHLORO)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-F

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG



Marine pollutant



15. Regulatory information

Fire Service Act Not dangerous goods under Fire Service Law

Law concerning Pollutant Release and Transfer Register

Specified class 1 substances (substance name, ordinance number and content)

Not regulated.

Class 1 substances (substance name, ordinance number and content)

2-Aminoethanol	Ordinance No. 20	3.7 %	(MONOETHANOLAMINE)
Boron compounds	Ordinance No. 405	5.6 %	(AMINE BORATE)
Chlorinated normal paraffin	Ordinance No. 597	6.4 %	(CHLORINATED NORMAL PARAFFIN)
N,N-DICYCLOHEXYLAMINE	Ordinance No. 188	1.7 %	(DICYCLOHEXYLAMINE)
N,N-Dipolyoxyalkylene-N-alkyl (or alkenyl) (C6-28) amine	Ordinance No. 577	1.0 %	(N,N-Dipolyoxyalkylene-N-alkyl (or alkenyl) (C6-28) amine)
POLY(OXYETHYLENE)ALKYL ETHER (ALKYL C=12-15)	Ordinance No. 407	3.0 %	(ALCOHOLS, C12-13, ETHOXYLATED)

Class 2 substances (substance name, ordinance number and content)

Not regulated.

Poisonous and Deleterious Substances Control Law None reported

16. Other information

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. Master Fluid Solutions cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.

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