SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083904

HDLL COOLANT 50/50 (RED)

Date of the previous version: 2016-03-02 **Revision Date:** *2017-06-02* **Version** *4*

1. IDENTIFICATION

Product identifier

Product name HDLL COOLANT 50/50 (RED)

Other means of identification

Product Code(s) 083904

Number 7YJ
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Antifreeze. Coolant.

Uses advised against Do not use for any purpose other than the one for which it is intended

Details of the supplier of the safety data sheet

Supplier Address TOTAL Specialties USA Inc
1201 Louisiana Street, Suite 1800
Houston, TX 77002
Phone: +1 800 323 3198

Contact Point Technical/ HSEQ

E-mail Address USRMLIN-info@total.com

Emergency telephone number
Company Phone Number +1 (908) 862-9300
Emergency telephone +1 866 928 0789 (24h/24, 7d/7)
+1 215 207 0061 (24h/24, 7d/7)

2. HAZARDS IDENTIFICATION

Classification

Acute Toxicity - Oral - Category 4
Reproductive toxicity - Category 2
Specific target organ systemic toxicity (repeated exposure) - Category 2

Label elements

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WARNING

Harmful if swallowed
Suspected of damaging fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Do not eat, drink or smoke when using this product

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/ container to an approved waste disposal plant

Unknown Acute Toxicity
Not applicable

Hazards not otherwise classified (HNOC)
None known

Other information

Physical-Chemical Properties	Contaminated surfaces will be extremely slippery.
Environmental properties	Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

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Chemical Name	CAS-No	Weight %
Monoethyleneglycol	107-21-1	90 – 95
Sodium 2-ethylhexanoate	19766-89-3	1-5
2,2'-oxydiethanol	111-46-6	0 – 3
sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	0 – 0.5
Sodium nitrite	7632-00-0	0 – 0.5
Sodium hydroxide	1310-73-2	0.1 – 1

** The exact percentage (concentration) of composition has been withheld as a trade secret*

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice If symptoms persist, call a physician. Show this material safety data sheet to the doctor in attendance. Do not breathe dust/fume/gas/mist/vapors/spray. IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. Get medical attention if irritation persists. Check for and remove any contact lenses.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician. Wash contaminated clothing before reuse.

Inhalation If not breathing, give artificial respiration. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.

Ingestion Rinse mouth. If symptoms persist, call a physician. Do NOT induce vomiting. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting - seek medical advice.

Protection of First-aiders Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Skin contact Avoid contact with skin and clothing. May cause slight irritation.

Eye contact Avoid contact with eyes. May cause slight irritation.

Inhalation Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion Harmful if swallowed. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Difficulty breathing. Coughing and/ or wheezing. Itching.

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

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Foam. Carbon dioxide (CO_2). Dry powder. Water spray. Sand.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Special Hazard Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Information Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery.

Other information See Section 12 for additional information.

Environmental precautions

General Information Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for cleaning up Dam up. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling

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Advice on safe handling

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Prevent the formation of vapors, mists and aerosols. Do not eat, drink or smoke when using this product. Use only in area provided with appropriate exhaust ventilation. When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist.

Hygiene measures

When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Avoid prolonged and repeated contact with the skin, especially with used or waste product.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep away from direct sunlight. Keep away from heat and sources of ignition.

Materials to Avoid

Strong oxidizing agents. Strong bases. Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits .

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Monoethyleneglycol 107-21-1	Ceiling 100 mg/m³	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m³	
Sodium hydroxide 1310-73-2	Ceiling 2 mg/m³	TWA: 2 mg/m³() (vacated) Ceiling: 2 mg/m³	IDLH: 10 mg/m³ Ceiling: 2 mg/m³

Exposure controls

Engineering Measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

General Information

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

Eye/face protection

If splashes are likely to occur, wear:. Safety glasses with side-shields.

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots. Impervious clothing.

Hand Protection

Impermeable gloves. Nitrile rubber. Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the

gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Avoid prolonged and repeated contact with the skin, especially with used or waste product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Appearance	limpid
Color	red
Physical State @20°C	liquid
Odor	Mild
Odor Threshold	No information available

Property	**Values**	**Remarks**	**Method**
pH	8.2 - 8.8		
Melting point/range		No information available	
Boiling point/boiling range	**> 197 °C** > 387 °F		
Flash point	**> 120 °C** > 248 °F		Cleveland Open Cup (COC) Cleveland Open Cup (COC).
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
upper	-	No information available	
Lower	-	No information available	
Vapor Pressure		No information available	
Vapor density		No information available	
Relative density	1.06	@ 15.5 °C	
Density	1060 - 1130 kg/m³	@ 15.5 °C	
Water solubility		No information available	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity, kinematic		No information available	

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Explosive properties	Not explosive
Oxidizing Properties	Not applicable
Possibility of hazardous reactions	Not applicable
Other information	
Freezing Point	-40 - (-36.4) °C

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks. Take precautionary measures against static discharges. Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Strong oxidizing agents.
Incompatible materials	Strong oxidizing agents. Strong bases. Strong acids.
Hazardous Decomposition Products	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principle Routes of Exposure	Inhalation, Ingestion, Eye contact, Skin contact.
Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Difficulty breathing. Coughing and/ or wheezing. Itching.
Skin contact	Avoid contact with skin and clothing. May cause slight irritation.
Eye contact	Avoid contact with eyes. May cause slight irritation.
Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Harmful if swallowed. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity - Product Information

Product Information	Harmful if swallowed

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Oral
ATEmix (oral) 542 mg/kg

Dermal
ATEmix (dermal) 3730 mg/kg

Inhalation
ATEmix (inhalation-dust/mist) 5.4 mg/l
ATEmix (inhalation-vapor) 402 mg/l

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Monoethyleneglycol 107-21-1	LD50 7712 mg/kg Oral (Rat)	LD50 > 3500 mg/kg Dermal (Mouse)	LC50(6h) >2.5 mg/l Inhalation (Rat)
Sodium 2-ethylhexanoate 19766-89-3	LD50 2043 mg/kg bw (rat - OECD 401)	LD50 > 2000 mg/kg bw (rat - OECD 402)	LC0 (8h) 0.11 mg/l (rat - vapour - OECD 403)
2,2'-oxydiethanol 111-46-6		LD50 13300 mg/kg bw (rabbit)	LC50 (4h) > 4.6 mg/l (rat - aerosol)
sodium 4(or 5)-methyl-1H-benzotriazolide 64665-57-2	LD50 640 - 1988 mg/kg (Rat - EPA databank)	LD50 > 2000 mg/kg (Rabbit - EPA/IUCLID databank)	
Sodium nitrite 7632-00-0	= 85 mg/kg (Rat)		= 5.5 mg/L (Rat) 4 h
Sodium hydroxide 1310-73-2	LD50 2000 mg/l (Rat)		

Sensitization Not classified as a sensitizer.
Carcinogenicity This product is not classified carcinogenic.

Mutagenicity This product is not classified as mutagenic.
Reproductive toxicity Suspected of damaging fertility or the unborn child.
STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard Not classified.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Acute aquatic toxicity - Product Information

No experimental data available

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms
Monoethyleneglycol 107-21-1	EC50(48h) >10000 mg/l	LC50 (95h) 72860 mg/l (Phimephales promelas) LC50(96h) 18500 mg/l (Rainbow trout)	EC50(48h) >100 mg/l Daphnia magna (OECD 202)	

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		EC50(96h) 6500-13000 mg/l (Selenastrum capricornulum)		
Sodium 2-ethylhexanoate 19766-89-3		LC50 (96h) > 100 mg/l (Oryzias latipes - OECD 203)		
2,2'-oxydiethanol 111-46-6	EC50 (96h) 9362 mg/l (green algae)	LC50 (96h) 75200 mg/l (Pimephales promelas)	EC100 (24h) >10000 mg/l (Daphnia magna) EC50 (24h) >10000 mg/l (Daphnia magna)	
sodium 4(or 5)-methyl-1H-benzotriazolide 64665-57-2		LC50 (96h) > 173 mg/l (Lepomis macrochirus- EPA databank)		
Sodium nitrite 7632-00-0		LC50 (96h) = 0.19 mg/L Oncorhynchus mykiss (flow-through) LC50 (96h) 0.092-0.13 mg/L Oncorhynchus mykiss (flow-through) LC50 (96h) 0.4-0.6 mg/L Oncorhynchus mykiss (semi-static) LC50 (96h) 0.65-1 mg/L Oncorhynchus mykiss (static) LC50 (96h) = 2.3 mg/L Pimephales promelas (flow-through) LC50 (96h) = 20 mg/L Pimephales promelas (static)		
Sodium hydroxide 1310-73-2		LC50 (96h) 35-189 mg/l LC50 (48h) 189 mg/l Leuciscus idus (OECD 203)	EC50(48h) 40.4 mg/l Daphnia magna EC50 > 100 mg/l Daphnia magna (OECD 202)	

Chronic aquatic toxicity - Product Information

No experimental data available

Chronic aquatic toxicity - Component Information

No information available

Effects on terrestrial organisms No experimental data available .

Persistence and degradability

General Information No information available.

Bioaccumulative potential

Product Information No information available.

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logPow No information available

Component Information .

Chemical Name	log Pow
Monoethyleneglycol 107-21-1	-1.36
Sodium nitrite 7632-00-0	-3.7

Mobility

Soil No information available

Other adverse effects

General Information No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Sodium nitrite 7632-00-0	Toxic Ignitable Reactive
Sodium hydroxide 1310-73-2	Toxic Corrosive

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

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ADR/RID Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

All the substances contained in this product are listed or exempted from listing in the following inventories:
U.S.A. (TSCA)
Canada (DSL/NDSL)
Europe (EINECS/ELINCS/NLP)
Australia (AICS)
Korea (KECL)
China (IECSC)
Japan (ENCS)
Philippines (PICCS)
New Zealand (NZIoC)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Monoethyleneglycol	107-21-1	90	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium nitrite 7632-00-0	100 lb			X
Sodium hydroxide 1310-73-2	1000 lb			X

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Monoethyleneglycol	107-21-1	90 – 95		Group I		
2,2'-oxydiethanol	111-46-6	0 – 3		Group I		

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CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Monoethyleneglycol	5000 lb	
Sodium nitrite	100 lb	
Sodium hydroxide	1000 lb	

U.S. State Regulations

California Proposition 65
This product contains chemicals known to the State of California to cause cancer or reproductive toxicity

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois
Monoethyleneglycol 107-21-1	X	X	X	X
2,2'-oxydiethanol 111-46-6			X	
Sodium hydroxide 1310-73-2	X	X	X	

16. OTHER INFORMATION

NFPA	**Health Hazard** 2	**Flammability** 1	**Instability** 0	**Physical and chemical hazards** -
HMIS	**Health Hazard** 2	**Flammability** 1	**Physical Hazard** 0	**Personal protection** X

NFPA (National Fire Protection Association)
HMIS (Hazardous Material Information System)
Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

Revision Date: 2017-06-02
Revision Note *** Indicates updated section
Abbreviations, acronyms
ACGIH = American Conference of Governmental Industrial Hygienists
bw = body weight
bw/day = body weight/day
EC x = Effect Concentration associated with x% response
GLP = Good Laboratory Practice
IARC = International Agency for Research of Cancer
LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals
LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals

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LL = Lethal Loading
NIOSH = National Institute of Occupational Safety and Health
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOEL = No Observed Effect Level
OECD = Organization for Economic Co-operation and Development
OSHA = Occupational Safety and Health Administration
UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

Legend

Section 8
ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH - National Institute for Occupational Safety and Health
TLV - Threshold Limit Values
PEL - Permissible Exposure Limits
IDHL - Immediately Dangerous to Life or Health concentrations
TWA - Time Weight Average
STEL - Short Term Exposure Limits
S* - Skin notation
TSCA - Toxic Substance Control Act

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above.It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk.The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity.The user bears sole liability for the precautions required when using the product.The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive.It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the Safety Data Sheet