

# Idemitsu CVTF Type H2

## Continuously Variable Transmission Fluid

### Description and Application

Idemitsu CVTF Type H2 is specifically formulated to meet and exceed the latest performance and protection requirements of continuously variable transmissions for Honda vehicles.

Idemitsu CVTF Type H2 is recommended to use where HCF-2 transmission fluid is specified.

### Features and Benefits

This advanced formulation incorporates proprietary additives with high quality base oil to provide superior performance in push belt CVTs to ensure:

- Outstanding anti-shudder performance and smooth shifting.
- Optimal fuel efficiency by maximizing the torque and horsepower output.
- Excellent resistance to oxidation and thermal breakdown, providing longer fluid life.
- Seamless torque transfer from the engine to the wheels and longer clutch life performance.
- Enhanced transmission life by minimizing metal-to-metal wear and protecting against sludge and varnish build-up.

### Typical Test Data

Characteristics	Units	Test Method	Typical Value
Density@15°C	g/cm <sup>3</sup>	ASTM D4052	0.85
Kinematic Viscosity @100°C	cSt	ASTM D445	7.07
Kinematic Viscosity @40°C	cSt	ASTM D445	29.20
Brookfield Viscosity@-40°C	mPa·s	ASTM D2983	8800
Foam, Seq I @24°C	ml-ml	ASTM D892	0-0
Foam, Seq II @93.5°C	ml-ml	ASTM D892	10-0
Foam, Seq III @24°C	ml-ml	ASTM D892	0-0

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# Technical Data Sheet

### Recommended Use

Idemitsu CVTF Type H2 is designed to exceed the performance required for latest generation of continuously variable transmissions where the following CVT fluid is specified:

- HCF-2

### Health and Safety

Prior to any use, consult the Safety Data Sheet (SDS) for information on hazard risks and product use parameters. To request the SDS, please email [ila.sds@idemitsu.com](mailto:ila.sds@idemitsu.com)

Idemitsu is ISO Certified

ISO 9001

ISO 14001

IATF 16949



Typical Test Data properties are provided as reference and may vary slightly. They do not constitute a specification.



Product formulations and information contained herein are subject to change without notification.

Rev1-8 / 2022

# SAFETY DATA SHEET



**IDEMITSU**

<b>Product Name:</b> Honda Genuine HCF-2 Transmission Fluid, 12 x 1 Quart Case	<b>PPE</b>  
Revision Date: 23-Jun-2017	Revision Number: 5

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### 1.1 Product Identifier

**Product Name:**

Honda Genuine HCF-2 Transmission Fluid, 12 x 1 Quart Case

### Other means of identification

**Product Code:**

1667-042

**Synonyms**

Not available

### 1.2 Recommended use of the chemical and restrictions on use

**Recommended Use**

Automotive Lubricant

**Uses advised against**

No information available

### 1.3. Details of the supplier of the safety data sheet

**Manufactured by**

Idemitsu Lubricants America Corporation, 701 Port Rd.,  
Jeffersonville, IN. 47130 Telephone: 812-285-8234, Fax:  
812-285-8243, Contact Name: Robin Hutchens, Email:  
sds@ilacorp.com

**24 Hour Emergency Phone Number:**

Within USA and Canada: 1 800-424-9300  
Outside USA and Canada: + 1 703-741-5970 (collect calls  
accepted)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification

This material is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and WHMIS 2015

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute Toxicity - Inhalation (Gases)	Not classified
Acute Toxicity - Inhalation (Vapors)	Not classified
Acute Toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 2 Testes
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified
Physical Hazards	Not classified
Physical Hazards	None

### 2.2. Label elements



#### Signal word

#### Hazard statements

#### Precautionary Statements - Prevention:

#### Precautionary Statements - Response:

#### Precautionary Statements - Storage:

#### Precautionary Statements - Disposal:

#### Hazards not otherwise classified (HNOC)

### 2.3 Other information

#### Other hazards

#### Warning

H361 - Suspected of damaging fertility or the unborn child if swallowed

P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P280 - Wear protective gloves/protective clothing and eye/face protection

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

Not applicable

• May be harmful in contact with skin

- May be harmful if swallowed
- Toxic to aquatic life
- Harmful to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

##### Hazardous Components

Chemical Name	CAS No.	Weight-%	US GHS Classification	Notes
Tricresylphosphate	1330-78-5	<1	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Reproductive 2 (H361) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	

##### Non-Hazardous Components

Chemical Name	CAS No.	Weight-%
Lubricating Base Stocks	Mixture	80-90

### 4. FIRST AID MEASURES

#### 4.1 4.1 First Aid Measures

##### General Advice

If symptoms persist, call a physician. Take a copy of the Safety Data Sheet when going for medical treatment.

##### Eye Contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice.

##### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before re-use. Call a physician immediately.

##### Inhalation

In case of inadequate ventilation wear respiratory protection. If breathing difficulties develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. If unconscious place in recovery position and seek medical advice. Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration. Call a physician immediately.

##### Ingestion

Do not induce vomiting without medical advice. If vomiting occurs naturally, have casualty lean forward to reduce the risk of aspiration. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

##### Protection of First-aiders

Use personal protective equipment. Avoid contact with eyes, skin and clothing.

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

##### Symptoms

No information available.

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

Notes to Physician                      Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### Flammable Properties

NFPA: Class IIIB Combustible Liquid

#### 5.1 Suitable Extinguishing Media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

#### Unsuitable Extinguishing Media:

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

#### 5.2 Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

#### Hazardous combustion products:

In case of fire hazardous decomposition products may be produced such as  
Carbon oxides  
Calcium Oxides (CaOx)  
Nitrogen oxides (NOx)  
Oxides of Phosphorus  
Sulphur oxides  
Zinc oxides

#### Sensitivity to mechanical impact:

No data available.

#### 5.3 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.

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

##### Personal precautions

Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use personal protection recommended in Section 8. Ensure adequate ventilation. Remove all sources of ignition.

#### 6.2 Environmental Precautions

##### Environmental Precautions

See section 12 for additional ecological information. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

#### 6.3 Methods and material for containment and cleaning up

##### Methods for Clean-up

Contain and collect spillage 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).

#### Spill Management

##### LARGE SPILLS

Eliminate sources of ignition. Prevent additional discharge of material if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 15 Regulatory Information) notify

the National Response Center.

**WATER SPILLS**

Prevent liquid entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Recover by pumping or with suitable absorbent. If liquid is too viscous for pumping, scrape up. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

**7. HANDLING AND STORAGE**

**7.1. Precautions for safe handling**

**Handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protection recommended in Section 8. Wash hands thoroughly after handling. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product.

**Safe Handling Advice**

Wear personal protective equipment. Do not breathe vapors or spray mist. Use product only in closed system.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage**

Keep in properly labeled containers. Keep container tightly closed in a dry and well-ventilated place.

**Technical measures/Precautions**

Ensure adequate ventilation. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

**Further information on storage conditions**

Keep container tightly closed

**Incompatible Materials and/or Coatings**

No information available

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

**Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Other Exposure Guidelines (If Generated)**

Chemical Name	OSHA PEL	ACGIH TLV	ACGIH OEL (STEL)	NIOSH REL TWA	ILA IHG	ILA ROEG	ILA Internal Exposure Limit
Oil mist, mineral	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>		TWA 5 mg/m <sup>3</sup> ST 10 mg/m <sup>3</sup>			

**8.2 Exposure controls**

**Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure

to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

### Personal Protective Equipment

#### Eye/face protection

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings.

#### Skin protection

Choose the appropriate protective clothing / gloves based on the tasks being performed to avoid exposed skin surfaces. **Glove Type:** Neoprene, Nitriles

#### 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.

#### General Hygiene Considerations

When using, do not eat, drink or smoke. Clean equipment, work area and clothing regularly.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance	Yellow / Brown
Physical State	Liquid
Odor	Mild
Odor Threshold	No information available
pH	Not applicable
Melting point / melting range	Not applicable
Boiling point / boiling range	No information available
Flash Point	182 °C / 360 °F COC ASTM D92
Evaporation Rate	No information available
Flammability Limit in Air	No information available
Explosion Limits	No information available
Vapor Pressure	No information available
Vapor Density (Air)	No information available
Density	0.85 g/cm <sup>3</sup> @15°C
Solubility	No information available
Partition Coefficient (n-octanol/water)	No information available
Autoignition Temperature	No information available
Decomposing Temperature	No information available
Viscosity	@ 40C = 25.57 cSt; @ 100C = 6.96 cSt

### Other Information

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

#### Reactivity

The product is chemically stable

### 10.2 Chemical stability

#### Chemical Stability

Stable under recommended storage conditions.

### 10.3 Possibility of Hazardous Reactions

#### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous Polymerization**

Hazardous polymerization does not occur.

10.4 Conditions to Avoid

**Conditions to Avoid**

Heat, flames and sparks.

10.5 Incompatible Materials

**Incompatible Materials**

Strong oxidizing agents.

10.6 Hazardous Decomposition Products

**Hazardous decomposition products**

Thermal decomposition can lead to release of irritating gases and vapors.

**11. TOXICOLOGICAL INFORMATION**

11.1 Information on likely routes of exposure

**Inhalation**

May cause irritation of respiratory tract.

**Eye contact**

May cause slight irritation.

**Skin Contact**

May be harmful in contact with skin.

**Ingestion**

May be harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tricresylphosphate 1330-78-5	3000 mg/kg (Rat)	3700 mg/kg (Rabbit)	

11.2 Information on toxicological effects

**Symptoms**

No information available

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

**Skin corrosion/irritation**

Not classified.

**Serious eye damage/eye irritation**

Not classified.

**Sensitization**

Not classified.

**Mutagenic effects**

Not classified.

11.4 Carcinogenicity

**Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, OSHA or ACGIH.

**Legend:**

NTP (National Toxicology Program) ACGIH (American Conference of Governmental Industrial Hygienists) IARC (International Agency for Research on Cancer) OSHA (Occupational Safety and Health Administration of the US Department of Labor)

**Reproductive Effects**

Suspected of damaging fertility or the unborn child if swallowed.

**Developmental Effects**

Not classified.

**STOT - single exposure**

Not classified.



<b>STOT - repeated exposure</b>	Not classified
<b>Chronic Toxicity</b>	Avoid repeated exposure.
<b>Aspiration hazard</b>	Not classified.

#### 11.5 Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

#### Product Information (Estimated):

<b>ATEmix (oral)</b>	>4800 mg/kg
<b>ATEmix (dermal)</b>	> 2,000 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	> 5 mg/l

## 12. ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

#### **Ecotoxicity effects**

Toxic to aquatic life. Harmful to aquatic life with long lasting effects. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

#### **Unknown aquatic toxicity**

10.15 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

12.2 Persistence and degradability No information available.

12.3 Bioaccumulation/Accumulation No information available

12.4. Mobility in soil No information available

PBT and vPvB assessment No information available

12.5 Other adverse effects: No information available

## 13. DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

#### **Waste Disposal Method**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging** Dispose of in accordance with local regulations.

**14. TRANSPORT INFORMATION**

<b>DOT - Non bulk</b>	Not regulated
<b>DOT - Bulk</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG/IMO</b>	Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

<b>TSCA</b>	All ingredients are on the inventory or exempt from listing		
<b>DSL</b>	All ingredients are on the inventory or exempt from listing		
<b>NDSL</b>	There are ingredients listed on the NDSL Inventory List		
<b>Chemical Name</b>	<b>NDSL</b>	<b>CAS No.</b>	<b>Weight-%</b>
Alkyl Phosphites	X	AAC 151872	<1
2-Mercapto-5-tert-nonyldithio-1,3,4-thiadiazole	X	97503-12-3	<0.1
<b>ELINCS</b>	Not Listed		
<b>ENCS</b>	All ingredients are on the inventory or exempt from listing		
<b>CHINA</b>	All ingredients are on the inventory or exempt from listing		
<b>KECL</b>	All ingredients are on the inventory or exempt from listing		
<b>PICCS</b>	Does not comply		
<b>AICS</b>	All ingredients are on the inventory or exempt from listing		
<b>NZIoC</b>	Does not comply		
<b>REACH</b>	All ingredients are on the inventory or exempt from listing		

**USA**

**Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazardous Categorization**

<b>Acute Health Hazard</b>	Reproductive Toxicity
<b>Chronic Health Hazard</b>	Reproductive Toxicity
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**CERCLA/SARA 302 & 304**

Section 302 & 304 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 355.

Chemical Name	CAS No.	Weight-%	RQ	TPQ
Methyl methacrylate	80-62-6	<0.1	1000 lb final RQ 454 kg final RQ	
Naphthalene	91-20-3	<0.001	100 lb final RQ 45.4 kg final RQ	

**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
Methyl methacrylate	80-62-6	<0.1	X
Naphthalene	91-20-3	<0.001	X

**CWA (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	CAS No.	Weight-%	U.S. - CWA (Clean Water Act)
Methyl methacrylate	80-62-6	<0.1	X
Naphthalene	91-20-3	<0.001	X

**State Regulations**

**California Proposition 65**



This product can expose you to a chemical, [Naphthalene ], which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Chemical Name	CAS No.	Weight-%	California Prop. 65	Maximum Allowable Dose for Reproductive Toxicity (MADLS)	Safe Harbor Limits for Cancer-causing Chemicals (NSRLs)
Naphthalene	91-20-3	<0.001	Carcinogen		5.8 µg/day

**State Right-to-Know**

Chemical Name	CAS No.	New Jersey
Petroleum distillates, hydrotreated light paraffinic	64742-55-8	X
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	X
Reaction product, amines, polyethylenepoly- w/ succinic anhydride, polyisobutenyl derivatives, borated	134758-95-5	X
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	X
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	X

Chemical Name	CAS No.	Massachusetts
Petroleum distillates, hydrotreated light paraffinic	64742-55-8	X

Chemical Name	CAS No.	Pennsylvania
Petroleum distillates, hydrotreated light paraffinic	64742-55-8	X
Reaction product, amines, polyethylenepoly- w/ succinic anhydride, polyisobutenyl derivatives, borated	134758-95-5	X
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	X

**New Jersey Worker and Community Right-to-Know Act:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows:  
PETROLEUM OIL (Lubricating Oil)

Canada

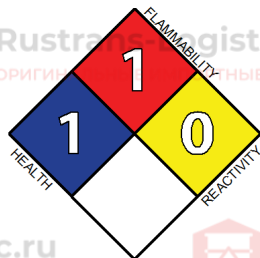
This material has been classified in accordance with the WHMIS 2015 regulation

Chemical Name	CAS No.	Weight-%	NPRI
2,6-di-tert-butyl p-cresol	128-37-0	<1	Listed
White mineral oil	8042-47-5	<1	Listed
Methyl methacrylate	80-62-6	<0.1	Listed
Diphenylamine	122-39-4	<0.01	Listed
Naphthalene	91-20-3	<0.001	Listed

**Legend**

NPRI - National Pollutant Release Inventory

**16. OTHER INFORMATION**



**NFPA**

**Health: 1**

**Flammability: 1**

**Instability: 0**

**Prepared By**

Lakyn Neumeayer

**Revision Date:**

23-Jun-2017

**Revision Summary:**

Formulation Change

**Disclaimer:**

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of Safety Data Sheet**