Product Name: Hand sanitizer



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Material Safety Data Sheet (MSDS)

In accordance with GHS Rev. 8 and The EU CLP REGULATION (EC) No 1272/2008

Section 1 - Chemical Product and Company Identification

1.1 Product Identification:

Product Name:	Hand sanitizer
Product Model:	/

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

Identified uses:	Hand washing and disinfection
Use advised against:	No data available.

1.3 Details of the Manufacture or supplier

Manufacture:	The Ford Group Inc
Address:	6814 Gant Road, Suite 126, Houston, TX 77066, USA
Telephone:	+1-281-537-1330
Fax:	+1-281-537-8673

1.4 Emergency telephone number

Emergency Telephone: +1-281-537-1330

Section 2 - Hazards Identification

2.1 Classification of the substance or mixture

GHS Classification:

Flammable liquids, category 2 Eye irritation, category 2A

2.2 GHS Label elements, including precautionary statements

GHS Labels: Pictogram(s):



Signal Word: Hazard Statement:

Danger H225: Highly flammable liquid and vapour H319: Causes serious eye irritation.

Precautionary statement(s)

Prevention precautionary	P210: Keep away from heat/sparks/open flames/hot surfaces - No smoking
statements:	
Response Precautionary Statements:	P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes.
	Remove contact lenses if present and easy to do - continue rinsing
	P337+313: If eye irritation persists get medical advice/attention
Storage Precautionary Statements:	P403+235: Store in a well ventilated place. Keep cool
Disposal Precautionary Statements:	P501: Dispose of contents and container in accordance with local / regional /
	national / international regulations.

2.3 Description of any hazards not otherwise classified

None. See section 11 for more detailed information on health effects and symptoms.

Section 3 - Composition/Information on Ingredient

Substance () Preparation ($\sqrt{}$) Article ()

Composition:

Chemical name	CAS No.	Content (% w/w)
Ethanol	64-17-5	65-85
Deionized water	7732-18-5	20-40
Carbomer resin	9007-20-9	0.1-2

Abbreviation: CAS No. is Chemical Abstract Service Registry Number.

Section 4 - First Aid Measures

4.1 Description of first aid measures:

Eye Contact: Flush opened eyes with plenty of water for several minutes. If eye irritation persists, get medical advice/attention

- Skin Contact: No need for first aid is anticipated. Wash off with water if necessary.
- Inhalation: No need for first aid is anticipated under normal usage (single exposure of small amount) .
- **Ingestion:** Accidental ingestion at a level high enough to be dangerous to health is unlikely. Rinse mouth with water. Obtain medical attention if symptoms appear or if large quantities have been ingested.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Section 5 -Extinguishing media

5.1 Extinguishing media

Suitable extinguishing media: Use water fog, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use a solid water stream as may scatter or spread fire. Use water fog to cool the unopened containers involved in fire.

5.2 Special hazards arising from the substance or mixture

Containers may explode when heated. Gives off irritating fumes (or gases) and combustion product(Carbon oxides, etc.) in a fire.

5.3 Advice for firefighters

Evacuate personnel to safe areas. Fight fire from a safe distance. Wear self-contained breathing apparatus and suitable protective equipment for firefighting.

5.4 Further information

No data available.

Section 6 - Accidental Release Measures

For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

6.1 Personal precautions, protective equipment and emergency procedures:

Eliminate all sources of ignition.

6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so.

6.3 Methods and materials for containment and cleaning up:

Clear up spills immediately and dispose of waste safely.

Section 7 - Handling and Storage

7.1 Precautions for safe handling:

Use according to its identified usage.

Avoid contact with eyes.

Keep away from heat/sparks/open flames/hot surfaces - No smoking

For more precautions measure see section 2.

7.2 Conditions for safe storage, including any incompatibilities:

Storage area should be cool, dry, well ventilated area. Keep container tightly closed. Store away from sources of heat or ignition.

Section 8 - Exposure Controls, Personal Protection

8.1 Exposure Limits:

Substance	CAS No.	OSHA PEL	NIOSH REL	ACGIH
Ethanol	64-17-5	1000 ppm;	1000 ppm	STEL: 1000 ppm
		1900 mg/cm ³		
8.2 Exposure controls				
Engineering Control:	gineering Control: General fire protection requirements.			
Personal protective equ	ipment:			
Respiratory Protection	: Not required u	Not required under normal condition.		
Eyes Protection:	Not required u	Not required under normal condition.		
Body Protection:	Not required u	Not required under normal condition.		
Hands Protection:	Not required u	Not required under normal condition.		
Other Protections:	Not required u	Not required under normal condition.		

Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties		
Appearance	Gel-like liquid	
Color	Colorless or slightly yellow	
Odor	Winey fragrance	
рН	5-8	
Melting point/freezing point	Not available.	
Initial boiling point and boiling range	Not available.	
Flash point	<23°C (close cup)-lit	
Evaporation rate	Not available.	
Flammability	Highly flammable liquid and vapor	
Upper explosive limit % (V/V)	3.3% -Ethanol	
Lower explosive limit % (V/V)	15% -Ethanol	
Vapor pressure	Not available.	
Vapor density	Not available.	
Relative density	0.86-0.88 (water=1) .	
Solubility(ies)	Soluble in water.	

Partition coefficient: n-octanol/water	Not available.
Ignition temperature	363℃.
Decomposition temperature	Not available.
Viscosity	Not available.

Section 10 - Stability and Reactivity

10.1 Stability: Stable under recommended storage conditions.

10.2 Conditions to Avoid: Heat, flames and mars.

10.3 Incompatible materials: Alkali metals, Oxidizing agents.

10.4 Hazardous Decomposition Products: Other decomposition products- no data available. In the event of fire:see section 5.

10.5 Possibility of hazardous reactions: None hazardous reactions known under normal condition.

Section 11 - Toxicological Information

Acute Toxicity:

Substance	CAS No.	LD50 oral - rat	LC50 inhalation - rat	LD50 skin - rabbit
Ethanol	64-17-5	7060mg/kg	20000ppm/10H	15800mg/kg
Skin Corrosion/Irritati	on:	Ethanol(CAS#64-17-5):		
		Skin - Rabbit		
		Result: No skin irritation	- 24 h	
		(OECD Test Guideline 40	04)	
Serious Eye Damage/Ey	ye Irritation:	Ethanol(CAS#64-17-5):		
		Eyes - Rabbit		
		Result: Moderate eye irritation		
		(OECD Test Guideline 405)		
Respiratory or Skin Sensitization		Based on available data, the classification criteria are not met.		
Germ Cell Mutagenicity Based on availab		Based on available data, t	on available data, the classification criteria are not met.	
Carcinogenicity:		None of the components of this product is listed as a carcinogen by IARC,		
		NTP, US OSHA.		
Reproductive Toxicity: Based on available data, the classification criteria are not met.		re not met.		
Specific Target Organ Toxicity - Single No known human health effects upon single exposure.		ire.		
Exposure (Globally Ha	rmonized System):			
Specific Target Organ Toxicity - Repeated No known human health effects upon repeated exposure.			osure.	

Exposure (Globally Harmonized System):

Aspiration Hazard:	Based on available data, the classification criteria are not met.	
Potential Health Effects:	Not expected to cause serious or immediate health effects. May cause slight	
	irritation to wounded skin. Causes serious eye irritation if liquid get into	
	eyes.	

Section 12 - Ecological Information

12.1 Toxicity

No known significant effects or critical hazards under normal usage.

12.2 Persistence and degradability

Ethanol(CAS#64-17-5): Biodegradability Result: 95 % - Readily biodegradable

12.3 Bioaccumulative potential

Ethanol(CAS#64-17-5): Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No ecological considerations under normal usage. Normal dilution into the sewer, sewage purification system is expected to be harmless to the ecological environment.

Section 13 - Disposal Considerations

Waste treatment methods

Product

Small quantity can be disposed as household waste. As for big quantity, Observe according to the national and local related regulations.

Contaminated packaging

Dispose of as unused product after empty.

Section 14 - Transport Information

14.2 UN proper shipping nameADR/RID/ADN, IMDG, IATAETHANOL SOLU	ΓΙΟΝ
14.3 Transport hazard class(es) ADR/RID/ADN, IMDG, IATA	
Class 3	
Label	
14.4 Packing group	
ADR/RID/ADN, IMDG, IATA	
14.5 Environmental hazards Marine pollutant(Y	es/No): No
14.6 Special precautions for user No data available.	
14.7 Transport in bulk according to Not applicable. Annex 1 of Marpol and the IBC Code	

Section 15 - Regulatory Information

EU Regulations

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flammable liquids, category 2

Eye irritation, categories 2A

US Regulations

OSHA:OSHA Hazard Communication Standard Status: This product is considered to be a hazardous substance under OSHA' s Federal Hazard Communication Standard 29 CFR 1910.1200.

USA CERCLA:

CERCLA Reportable Quantity (RQ): This product has not been assigned a reportable quantity.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16 - Additional Information

16.1 Reference

[1]	IPCS:The International Chemical Safety Cards (ICSC)	website: http://www.ilo.org/dyn/icsc/showcard.home
[2]	IARC	website: http://www.iarc.fr/
[3]	OECD: The Global Portal to Information on	website:
	Chemical Substances,	http://www.echemportal.org/echemportal/index?pageID=0&re
E 43		quest_locale=en
[4]	CAMEO Chemicals,	website: http://cameochemicals.noaa.gov/search/simple
[5]	NLM:ChemIDplus,	website:
		http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
[6]	EPA: Integrated Risk Information System,	website: http://cfpub.epa.gov/iris/
[7]	U.S. Department of Transportation:ERG,	website: http://www.phmsa.dot.gov/hazmat/library/erg
[8]	Germany GESTIS-database on hazard substance	website: http://gestis-en.itrust.de/

16.2 Abbreviations and acronyms

рН	Relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline
OSHA	Occupational Safety and Health Administration
NTP	National Toxicilogy Program
IARC	International Agency for Research on Cancer
ACGIH	The American Conference of Governmental Industrial Hygienists
UN	The United Nations
ADR	Agreement on Dangerous Goods by Road
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
PC-STEL	Short term exposure limit
PC-TWA	Time Weighted Average
LC50	Lethal Concentration 50%
LD50	Lethal Dose 50%
NOEC	No Observed Effect Concentration
EC50	Effective Concentration 50%
PBT	Persistent, Bioaccumulative, Toxic
vPvB	very Persistent, very Bioaccumulative

16.3 Disclaimer

-This safety data sheet was prepared in accordance with UN GHS Rev.7, The EU CLP REGULATION (EC) No 1272/2008,

and US OSHA Hazard Communication Standards (29 CFR 1910.1200).

-The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product

16.4 Information on revision

MSDS Creation Date:	March 24, 2020
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MSDS Edition:	1.0

End of MSDS