Ashland always solving	Page: 1
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage™ LC-80 polymer	Version: 1.4
[™] Trademark, Ashland or its subsidiaries, registered	
in various countries	
826042	

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

:

Product identifier

Trade name

Advantage™ LC-80 polymer ™ Trademark, Ashland or its subsidiaries, registered in various countries

Relevant identified uses of the substance or mixture and uses advised against Recommended use : Cosmetic additive

Details of the supplier of the safety data sheet Ashland P.O. Box 2219 Columbus, OH 43216 United States of America (USA) +1-614-790-3333	Emergency telephone number 1-800-ASHLAND (1-800-274-5263) Regulatory Information Number 1-800-325-3751 Product Information +1-614-790-3333
EHSProductSafety@ashland.com	

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Flammable liquids	: Category 2
Eye irritation	: Category 2A
Specific target organ systemic toxicity - single exposure	: Category 3 (Central nervous system)
GHS label elements Hazard pictograms	
Signal Word	: Danger

Ashland always solving	Page: 2
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1.4

Hazard Statements	 Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness.
Precautionary Statements	 Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection. Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool.
Other hazards None known.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

Ashland always solving	Page: 3
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1.4

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (%)
ETHANOL	64-17-5	Flam. Liq. 2; H225	52.00
		Eye Irrit. 2A; H319	
		STOT SE 3; H336	

SECTION 4. FIRST AID MEASURES

General advice	:	Move out of dangerous area. Call a POISON CENTRE or doctor/physician if exposed or you feel unwell. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
lf inhaled	:	Move to fresh air. If unconscious, place in recovery position and seek medical advice. Consult a physician after significant exposure.
In case of skin contact	:	If on skin, rinse well with water. First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water. If on clothes, remove clothes.
In case of eye contact	:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye.
If swallowed	:	Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	Causes serious eye irritation. May cause drowsiness or dizziness. No symptoms known or expected.
Notes to physician	:	No hazards which require special first aid measures.

Ashland always solving	Page: 4
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1.4

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray Foam Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	carbon dioxide and carbon monoxide formaldehyde-like Hydrocarbons
Specific extinguishing methods	:	
		Product is compatible with standard fire-fighting agents.
Further information	:	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use a water spray to cool fully closed containers.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Per	sonal precautions,	:	Evacuate personnel to safe areas.
pro	tective equipment and		Remove all sources of ignition.
em	ergency procedures		Ensure adequate ventilation.
	2		Beware of vapours accumulating to form explosive
			concentrations. Vapours can accumulate in low areas.
			Persons not wearing protective equipment should be excluded

Ashland always solving	Page: 5
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1.4

from area of spill until clean-up has been completed.

Environmental precautions	 Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: 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).
Other information	: Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water spray jet.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling :	 Open drum carefully as content may be under pressure. Avoid formation of aerosol. Provide sufficient air exchange and/or exhaust in work rooms. Do not breathe vapours/dust. Do not smoke. Container hazardous when empty. Take precautionary measures against static discharges. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage :	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. No smoking.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Ashland always solving	Page: 6
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1.4

Components	CAS-No.	Value type	Control	Basis
		(Form of	parameters /	
		exposure)	Permissible	
			concentration	
ETHANOL	64-17-5	STEL	1,000 ppm	ACGIH
		TWA	1,000 ppm	NIOSH REL
			1,900 mg/m3	
		TWA	1,000 ppm	OSHA Z-1
			1,900 mg/m3	
		TWA	1,000 ppm	OSHA P0
			1,900 mg/m3	
		PEL	1,000 ppm	CAL PEL
			1,900 mg/m3	

Engineering measures	:	Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Hand protection Remarks :	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection :	Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.
Skin and body protection :	Wear as appropriate: Impervious clothing Safety shoes Flame-resistant clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear resistant gloves (consult your safety equipment supplier).
Hygiene measures :	Wash hands before breaks and at the end of workday. When using do not eat or drink. When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	viscous
Physical state	:	liquid

Ashland always solving	Page: 7
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1.4

Colour	:	clear
Odour	:	No data available
Odour Threshold	:	No data available
рН	:	No data available
Melting point/freezing point	:	No data available
Boiling point/boiling range	:	173.3 °F / 78.5 °C
Flash point	:	60.1 °F
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	53.3 hPa (19 °C)
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	0.983 g/cm3 (25 °C)
Solubility(ies) Water solubility	:	No data available
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Thermal decomposition	:	No data available
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available

Ashland always solving	Page
SAFETY DATA SHEET	Revision Date: 03/19/20
	Print Date: 9/21/20
	SDS Number: R07185
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1

Oxidizing properties : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air.
Conditions to avoid	: excessive heat
	Heat, flames and sparks.
Incompatible materials	: Acids Alkali metals Ammonia Bases halogens inorganic materials Oxidizing agents sodium
Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	: Inhalation Skin contact Eye Contact Ingestion
Acute toxicity Not classified based on availal <u>Components:</u> ETHANOL:	ble information.
Acute oral toxicity	: LD50 (Rat): 7,060 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 117 - 125 mg/l Exposure time: 4 h Test atmosphere: vapour

Ashland always solving	Page: 9
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage™ LC-80 polymer	Version: 1.4
™ Trademark, Ashland or its subsidiaries, registered	
in various countries	
826042	

Acute dermal toxicity : LDLo (R

: LDLo (Rabbit): 20 g/kg

Skin corrosion/irritation

Not classified based on available information. <u>Product:</u> Remarks: May cause skin irritation in susceptible persons.

Result: Repeated exposure may cause skin dryness or cracking.

Components:

ETHANOL: Result: Slight, transient irritation

Serious eye damage/eye irritation

Causes serious eye irritation. **Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

Components:

ETHANOL: Result: Irritating to eyes.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information. Germ cell mutagenicity Not classified based on available information. **Carcinogenicity** Not classified based on available information. **Reproductive toxicity** Not classified based on available information. **STOT - single exposure** May cause drowsiness or dizziness. **Components:** ETHANOL: Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information. **Aspiration toxicity** Not classified based on available information. **Further information** <u>Product:</u>

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and

Ashland always solving	Page: 10
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1.4

vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

Carcinogenicity: IARC	Group 1: Carcinogenic to humans	
	ETHANOL	64-17-5
OSHA	No component of this product present at levels greater than o equal to 0.1% is on OSHA's list of regulated carcinogens.	
NTP	No component of this product pe equal to 0.1% is identified as a l by NTP.	resent at levels greater than or known or anticipated carcinogen

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity <u>Product:</u> Ecotoxicology Assessment Acute aquatic toxicity	:	Not classified based on available information.
Chronic aquatic toxicity	:	Not classified based on available information.
<u>Components:</u> ETHANOL: Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 12,000 - 16,000 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h Test Type: static test
Persistence and degradabilit <u>Components:</u> No data available Bioaccumulative potential <u>Components:</u> ETHANOL: Partition coefficient: n- octanol/water No data available	-	log Pow: -0.31

Ashland always solving	Page: 11
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1.4

available

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
General advice	 Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
	Dispose of in accordance with all applicable local, state and federal regulations.
Contaminated packaging	 Empty remaining contents. Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBE	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
----------	----------------------	------------------	-----------------------	------------------	------------------------------------

U.S. DOT - ROAD

UN	1866	Resin solution	3	II	

CFR_RAIL_C

UN	1866	Resin solution	3	II	

Ashland always solving	Page: 12
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1.4

U.S. DOT - INLAND WATERWAYS

UN	1866	Resin solution	3	II	
DG_R	OAD_C				
UN	1866	RESIN SOLUTION	3	I	
DG_R	AIL_C				
UN	1866	RESIN SOLUTION	3	II	
FDG_IN	IWT_C				
UN	1866	RESIN SOLUTION	3	I	
NTERN	ΙΔΤΙΟΝΔΙ	_ MARITIME DANGEROUS	GOODS		
				11	
UN	1866	RESIN SOLUTION	3	II	
L		_ AIR TRANSPORT ASSOC			

INTERN	INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER					
UN	1866	Resin solution	3	I		

3

||

MX_DG

UN

	1000	DEGINIA GOLLIQIONES DE		
UN	1866	RESINA, SOLUCIONES DE	3	

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

1866 Resin solution

Marine pollutant	no

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

Ashland always solving	Page: 13
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage™ LC-80 polymer	Version: 1.4
[™] Trademark, Ashland or its subsidiaries, registered	
in various countries	
826042	

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ. SARA 304 Extremely Hazardous Substances Reportable Quantity This material does not contain any components with a section 304 EHS RQ.

SARA 311/312	Hazards	:	Flammable (gases, aerosols, liquids, or solids) Serious eye damage or eye irritation Specific target organ toxicity (single or repeated exposure)	
		This material does not contain any components with a section 302 EHS TPQ.		
SARA 313			known CAS numbers that e	ain any chemical components with xceed the threshold (De Minimis) by SARA Title III, Section 313.
Pennsylvania	Right To Know ETHANOL		64-17-5	
			ONOETHYL ESTER VINYL COPOLYMER	25087-06-3
New Jersey Ri	ght To Know ETHANOL			64-17-5
			ONOETHYL ESTER VINYL COPOLYMER	25087-06-3
California Prop 65		This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.		
		All components of this product are on the Canadian DSL		
AICS		:	On the inventory, or in comp	pliance with the inventory
ENCS		:	On the inventory, or in comp	pliance with the inventory
ENCS		:	On the inventory, or in comp	pliance with the inventory
KECI		:	On the inventory, or in comp	pliance with the inventory
PICCS		:	On the inventory, or in comp	pliance with the inventory
IECSC		:	On the inventory, or in comp	pliance with the inventory
TCSI		:	On the inventory, or in comp	pliance with the inventory

Ashland always solving	Page: 14
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1.4

TSCA

: On TSCA Inventory

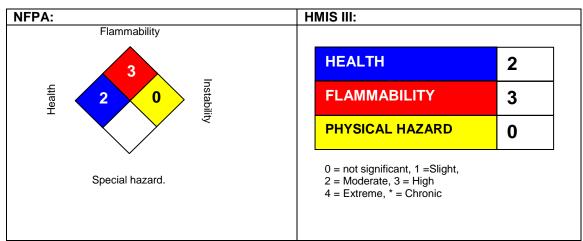
Inventories

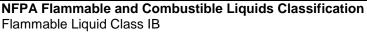
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 03/19/2018





Full text of H-Statements

H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Sources of key data used to compile the Safety Data Sheet Ashland internal data including own and sponsored test reports The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

Ashland always solving	Page: 15
SAFETY DATA SHEET	Revision Date: 03/19/2018
	Print Date: 9/21/2018
	SDS Number: R0718539
Advantage [™] LC-80 polymer [™] Trademark, Ashland or its subsidiaries, registered in various countries 826042	Version: 1.4

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials: bw - Body weight: CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act: CMR - Carcinogen, Mutagen or Reproductive Toxicant: DIN -Standard of the German Institute for Standardisation: DOT - Department of Transportation: DSL -Domestic Substances List (Canada): ECx - Concentration associated with x% response: EHS -Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA -National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD -Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention: PBT - Persistent, Bioaccumulative and Toxic substance: PICCS -Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative