P Ashland always solving	Page:
SAFETY DATA SHEET	Revision Date: 02/20/2019
	Print Date: 4/17/2019
	SDS Number: R071835
Advantage™ REVIVE polymer	Version: 1.5
™ Trademark, Ashland or its subsidiaries, registered	
in various countries	
934581	

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Advantage™ REVIVE Trade name

polymer

™ Trademark, Ashland or its subsidiaries, registered in

various countries

POLYVINYL PYRROLIDONE Substance name

Substance No.

EC-No. 618-363-4

CAS-No. 9003-39-8

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

Recommended use : Personal care

Details of the supplier of the safety data **Emergency telephone number** sheet

Ashland

P.O. Box 2219

Columbus, OH 43216

United States of America (USA)

+1-614-790-3333

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

Combustible Dust

GHS label elements

Signal Word : Warning

Hazard Statements : May form combustible dust concentrations in air.

P Ashland always solving	Page: 2
SAFETY DATA SHEET	Revision Date: 02/20/2019
	Print Date: 4/17/2019
	SDS Number: R0718355
Advantage™ REVIVE polymer	Version: 1.8
™ Trademark, Ashland or its subsidiaries, registered	
in various countries	
934581	

Precautionary Statements : **Prevention**:

Keep dust/air mixtures away from ignition sources.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Chemical nature : organic

Hazardous components No hazardous ingredients

SECTION 4. FIRST AID MEASURES

General advice : No hazards which require special first aid measures.

If inhaled : If breathed in, move person into fresh air.

If unconscious, place in recovery position and seek medical

advice

If symptoms persist, call a physician.

In case of skin contact : First aid is not normally required. However, it is

recommended that exposed areas be cleaned by washing

with soap and water.

In case of eye contact : 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

: The most important known symptoms and effects are

described in the labelling (see Section 2.2) and/or Section 11.

Notes to physician : No hazards which require special first aid measures.

P Ashland always solving	Page: 3
SAFETY DATA SHEET	Revision Date: 02/20/2019
	Print Date: 4/17/2019
	SDS Number: R0718355
Advantage™ REVIVE polymer	Version: 1.8
™ Trademark, Ashland or its subsidiaries, registered	
in various countries	
934581	

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray

Foam

Hazardous combustion

products

: Carbon dioxide (CO2) Carbon monoxide

Nitrogen oxides (NOx)

Specific extinguishing

methods

:

Product is compatible with standard fire-fighting agents.

Further information : Standard procedure for chemical fires.

Special protective equipment

for firefighters

: In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Avoid dust formation. Avoid breathing dust.

Material can create slippery conditions.

Persons not wearing protective equipment should be excluded

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

Environmental precautions : Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

: Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

Other information : Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid dust formation.

Ensure all equipment is electrically grounded and bonded

before beginning transfer operations.

The material can accumulate static charge and can therefore

cause electrical ignition of flammable atmospheres.

P Ashland always solving	Page: 4
SAFETY DATA SHEET	Revision Date: 02/20/2019
	Print Date: 4/17/2019
	SDS Number: R0718355
Advantage™ REVIVE polymer ™ Trademark, Ashland or its subsidiaries, registered in various countries 934581	Version: 1.8

Smoking, eating and drinking should be prohibited in the application area.

For personal protection see section 8.

Maintain good housekeeping. Do not permit dust layers to accumulate, for example, on floors, ledges, and equipment, in order to avoid any potential for dust explosion hazards.

For further guidance on prevention of dust explosions, refer to National Fire Protection Association (NFPA) 654: "Standard for the Prevention of Fire and Dust Explosions, from the Manufacturing, Processing and Handling of Combustible Particulate Solids".

Conditions for safe storage : No smoking.

Materials to avoid : No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures

: Provide appropriate exhaust ventilation at places where dust is formed.

General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, 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.

For exposures to dust, utilize the exposure limits for Particulates (insoluble) Not Otherwise Classified (PNOC). ACGIH TWA - 10 mg/m3 inhalable fraction, 3 mg/m3 respirable fraction. OSHA PEL - 15 mg/m3 total dust, 5

mg/m3 respirable fraction.

Personal protective equipment

Respiratory protection In the case of vapour or particulate formation use a respirator

with an approved chemical adsorbent canister or filter.

Hand protection

Material butyl-rubber : 480 min Break through time Glove thickness > 0.5 mm

P Ashland always solving	Page: 5
SAFETY DATA SHEET	Revision Date: 02/20/2019
	Print Date: 4/17/2019
	SDS Number: R0718355
Advantage™ REVIVE polymer	Version: 1.8
™ Trademark, Ashland or its subsidiaries, registered	
in various countries	
934581	

Remarks : The exact break through time can be obtained from the

protective glove producer and this has to be observed. Gloves should be discarded and replaced if there is any indication of

degradation or chemical breakthrough.

Eye protection : Safety glasses

Skin and body protection : Wear as appropriate:

Safety shoes

Wear resistant gloves (consult your safety equipment

supplier).

Hygiene measures : Avoid breathing dust.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Physical state : solid

Colour : white, off-white

Odour : No data available

Odour Threshold : No data available

pH : 5.0 - 11.0

Concentration: 1 %

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Flash point : Not applicable

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 : No data available

P Ashland always solving	Page: 6
SAFETY DATA SHEET	Revision Date: 02/20/2019
	Print Date: 4/17/2019
	SDS Number: R0718355
Advantage™ REVIVE polymer	Version: 1.8
™ Trademark, Ashland or its subsidiaries, registered	
in various countries	
934581	

Relative vapour density : No data available

Relative density : No data available

Density : 1 g/cm3 (20 °C)

Solubility(ies)

Water solubility : insoluble

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

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

: Dust may form explosive mixture in air.

Conditions to avoid : Keep away from heat, flame, sparks and other ignition

sources.

Incompatible materials : Strong oxidizing agents

strong reducing agents

Hazardous decomposition

products Carbon monoxide

Carbon dioxide (CO2) Nitrogen oxides (NOx)

P Ashland always solving	Page: 7
SAFETY DATA SHEET	Revision Date: 02/20/2019
	Print Date: 4/17/2019
	SDS Number: R0718355
Advantage™ REVIVE polymer	Version: 1.8
™ Trademark, Ashland or its subsidiaries, registered	
in various countries	
934581	

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation exposure Skin contact

Eye Contact Ingestion

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury., Product dust may be irritating to eyes, skin and respiratory system.

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

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Further information

Product:

Remarks: No data available

Carcinogenicity:

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

P Ashland always solving	Page: 8
SAFETY DATA SHEET	Revision Date: 02/20/2019
	Print Date: 4/17/2019
	SDS Number: R0718355
Advantage™ REVIVE polymer	Version: 1.8
™ Trademark, Ashland or its subsidiaries, registered	
in various countries	
934581	

NTP 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.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Short-term (acute) aquatic

hazard

: Not classified based on available information.

Long-term (chronic) aquatic

hazard

: Not classified based on available information.

Persistence and degradability

No data available

Bioaccumulative potential

No data available **Mobility in soil**

No data available

Other adverse effects

No data available

Product:

Additional ecological

information

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : Dispose of in accordance with all applicable local, state and

federal regulations.

Contaminated packaging : Empty remaining contents.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

						Paga: 0
Ashland always solving ™					Page: 9	
SAFETY DA	TA SHEET				Revision	Date: 02/20/2019
						t Date: 4/17/2019
Advantage™ REVIVE polymer ™ Trademark, Ashland or its subsidiaries, registered in various countries 934581				SDS N	umber: R0718355 Version: 1.8	
ID NUMBER	ID NUMBER PROPER SHIPPING NAME *HA				PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
U.S. DOT - ROAL	Not dangerous goods					
CFR_RAIL_C	Not dangerous goods					
U.S. DOT - INLAND	Not dangerous goods					
TDG_ROAD_C	TDG_ROAD_C Not dangerous goods					
TDG_RAIL_C	Not dangerous goods					
TDG_INWT_C						
	Not dangerous goods					
	MARITIME DANGEROUS GOO	ODS				
	Not dangerous goods					
	AIR TRANSPORT ASSOCIATI Not dangerous goods	ION -	CARGO			
	AIR TRANSPORT ASSOCIATI	ION - 1	DASSEN	IGER		
	Not dangerous goods	- 101	AJULI	- CLIN		
MX_DG	Not dangerous goods					
						

Ashland always solving ™	Page: 10
SAFETY DATA SHEET	Revision Date: 02/20/2019
	Print Date: 4/17/2019
	SDS Number: R0718355
Advantage™ REVIVE polymer ™ Trademark, Ashland or its subsidiaries, registered in various countries 934581	Version: 1.8

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 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 : Combustible Dust

SARA 302 : This material does not contain any components with a section

302 EHS TPQ.

SARA 313 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.

Pennsylvania Right To Know

POLYVINYL PYRROLIDONE 9003-39-8

New Jersey Right To Know

POLYVINYL PYRROLIDONE 9003-39-8

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.

The components of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

P Ashland always solving	Page: 11
SAFETY DATA SHEET	Revision Date: 02/20/2019
	Print Date: 4/17/2019
	SDS Number: R0718355
Advantage™ REVIVE polymer	Version: 1.8
™ Trademark, Ashland or its subsidiaries, registered	
in various countries	
934581	

TCSI : On the inventory, or in compliance with the inventory

TSCA : On TSCA Inventory

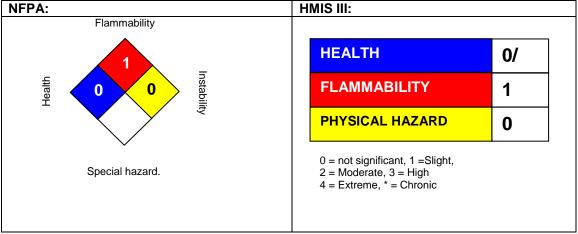
Inventories

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: 02/20/2019



NFPA Flammable and Combustible Liquids Classification

Not applicable

Full text of H-Statements

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 Solving	Page: 12
SAFETY DATA SHEET	Revision Date: 02/20/2019
	Print Date: 4/17/2019
	SDS Number: R0718355
Advantage™ REVIVE polymer ™ Trademark, Ashland or its subsidiaries, registered in various countries 934581	Version: 1.8

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