MATERIAL SAFETY DATA SHEET

100

SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME	VERSALINK* QE-86A CURATIVE VERSALINK* is a registered trademark of Air Products and Chemicals, Inc.
MSDS REVISION NUMBER	4
MANUFACTURER	Air Products and Chemicals, Inc. 7201 Hamilton Blvd., Allentown, PA 18195-1501
TELEPHONE NUMBER	800-345-3148
EMERGENCY TELEPHONE NUMBER(S)	800-523-9374 (Continental U.S.) 610-481-7711 (Outside Continental U.S.)
DATE PREPARED	APRIL 1999

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EMERGENCY OVERVIEW

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HMIS/NFPA HEALTH 1 FLAMMABILITY 1 REACTIVIT

PHYSICAL FORM	waxy solid
at processing temperature	Clear Liquid
COLOR	Off-White
at processing temperature	Straw yellow
HAZARDS	Mild eye irritant. Mild skin irritant.
EXTINGUISHING MEDIA	Ignition will give rise to a Class B fire. In case of large fire use: alcohol foam, water spray. In case of small fire use: carbon dioxi (CO2), dry chemical, dry sand or limestone.

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C.A.S. CHEMICAL NAME	Alpha-Hydro-Omega-Hydro-Poly(Oxy-1, 4-Butanediyl)
SYNONYMS	None
CHEMICAL FAMILY	Polyethylene Glycol Solution
EMPIRICAL FORMULA	No Data
INTENDED USE	No Data

Updated health hazard data. ACUTE TOX
EFFECTS DATA Updated fire and explosi
data. FLASH POINT (closed cup) Update
Physical Data.

REDIENTS

S Number and Chemical Name

190-06-1 Alpha-Hydro-Omega-Hydro-Poly(Oxy-1,
Butanediyl)

POSURE LIMITS

	STEL		CEILING	
mg/m3	ppm	mg/m3	ppm	mg/m
N/E	N/E	N/E	N/E	N/E
N/E	N/E	N/E	N/E	N/E

lished.

LTH HAZARDS

JRE

ıder the following conditions:
is sprayed or heated at a temperature above ambie
F.

RDS
established for the product. Maintain air
concentrations in the workplace at the lowest
els.

ritant.
rritant.

MS OF EXPOSURE (Acute effects)
eyes may cause mild irritation and discomfort.
skin causes mild irritation and discomfort.
mists may cause irritation in the respiratory

MS OF EXPOSURE (Possible Longer Term Effects)

MEDICAL CONDITIONS
None known

CARCINOGENS UNDER C
This product con
percent or great

SECTION 4 - FIRST A

EYE CONTACT
Hold eyelids apa
water for at lea

SKIN CONTACT
Wash affected ar
clothing and sho

INHALATION
Move patient to
give assisted re
oxygen may be in
victim's head to

INGESTION
If swallowed, ca
contents by gast
by medical perso
unconscious pers

SECTION 5 - FIRE AN

FLASH POINT (closed

UPPER EXPLOSION LIM
LOWER EXPLOSION LIM

AUTOIGNITION TEMPER
FIRE HAZARD CLASSIF
Class IIIB

EXTINGUISHING MEDIA
Ignition will gi
use: water spray
dioxide (CO2), d

SPECIAL FIRE FIGHTI
Firefighters sho
suit and a self-
Retain expended

UNUSUAL FIRE AND EXPLOSION HAZARDS

May generate toxic or irritating combustion products.
Sudden reaction and fire may result if product is mixed with oxidizing agent.
May generate carbon monoxide gas.
Personnel in vicinity and downwind should be evacuated.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES (Removal of ignition sources, diking etc)

Stop the leak, if possible. Shut off or remove all ignition sources. Construct a dike to prevent spreading (includes molte liquids until they freeze).

CLEAN-UP PROCEDURES

If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in an appropriate chemical wa container. Transfer to containers by suction, preparatory for later disposal. Place in metal containers for recovery or disposal. Flush area with water spray. Clean-up personnel must equipped with self contained breathing apparatus and butyl rub protective clothing. For large spills, recover spilled materia with a vacuum truck. Flush spill with cold water to freeze material, then scoop up. Insulated gloves such as thermal line rubber when handling hot material.

OTHER EMERGENCY ADVICE

Wear protective clothing, boots, gloves, and eye protection.

SECTION 7 - HANDLING AND STORAGE

STORAGE

Keep away from: oxidizers. Keep in cool, dry, ventilated stora and in closed containers.

HANDLING

Avoid contact with skin or eyes. When handling, do not eat, drink, or smoke. Avoid using in any spray application without strict conformance to all applicable electrical codes and the OSHA limit for maximum allowable airborne concentrations.

OTHER PRECAUTIONS

Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations (e.g. OSHA). Do not breathe fumes/spray

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SECTION 8 - PERSONAL PROTECTION / EXPOSURE CONTROLS

OTECTION
mical safety glasses.

ROTECTION
ulated gloves such as thermal lined rubber when handling hot
erial.

ATORY PROTECTION
required under normal conditions in a well-ventilated
kplace.

TIVE CLOTHING
g sleeved clothing.

ERING CONTROLS
specific controls needed.

ND HYGIENIC PRACTICES
vide readily accessible eye wash stations and safety showers.

N 9 - TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

AL FORM	waxy solid
	Off-White
	No Data
PRESSURE (mm Hg at 21C (70F))	<1.00000
DENSITY (Air = 1)	2.41
G POINT	>200.00 C (>392.00 F)
G POINT	45.00 C (113.00F)
IC GRAVITY (Water = 1)	0.98
LAR WEIGHT	70

N 10 - STABILITY AND REACTIVITY

AL STABILITY
ble at ambient temperatures. Unstable in closed containers at
peratures >200C or if spilled at temperatures >100C.

IONS TO AVOID (if unstable)
applicable

ATIBILITY (Materials to Avoid)
dizing Agents (i.e. perchlorates, nitrates etc.). Sodium or
cium Hypochlorite. Reaction with peroxides may result in
lent decomposition of peroxide possibly creating an explosion.

OUS DECOMPOSITION PRODUCTS (from burning, heating, or reaction
ther materials).
oon Monoxide in a fire. Carbon Dioxide in a fire. Irritating

toxic fumes at elevated temperatures. Tetrahydrofuran.

US POLYMERIZATION
not occur

ONS TO AVOID (if polymerization may occur)
applicable

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11 - TOXICOLOGICAL PROPERTIES

RAL TOXICITY (LD50, RAT)
00.00 mg/kg

ERMAL TOXICITY (LD50, RABBIT)
0.00 mg/kg (No deaths)

NHALATION TOXICITY (LC50, RAT)
0 mg/L / 4 hr (No deaths)

CUTE EFFECTS
ata

ION EFFECTS DATA
rritation data are known for this product.

/SUBCHRONIC DATA
elayed, subchronic or chronic test data are known.

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12 - ECOLOGICAL INFORMATION

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ata

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13 - DISPOSAL CONSIDERATIONS

ISPOSAL
ly with all Federal, State and Local Regulations.

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14 - TRANSPORT INFORMATION

K SHIPPING NAME	Refer to Bill of Lading.
PPING DATA	Refer to Bill of Lading.

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15 - REGULATORY INFORMATION

SUBSTANCES CONTROL ACT (TSCA)-
l components are included in the EPA Toxic Substances Control
t (TSCA) Chemical Substance Inventory.

Hazard Communication Standard (29CFR1910.1200) hazard class(es)
ne

ARA Title III Section 312 (40CFR370) hazard class
ne

ARA Title III Section 313 (40CFR372) toxic chemicals above "de
is" level are
ne

REGULATIONS

SITION 65 SUBSTANCES (component(s) known to the State of
ornia to cause cancer and/or reproductive toxicity and subject
rning and discharge requirements under the "Safe Drinking Water
oxic Enforcement Act of 1986")
ne

ERSEY TRADE SECRET REGISTRY NUMBER(S)
ne

ON 16 - INTERNATIONAL REGULATIONS

A
DSL
Included on Inventory.
WHMIS HAZARD CLASSIFICATION
None
WHMIS SYMBOLS
None

EAN ECONOMIC COMMUNITY (EEC)
EINECS/ELINCS MASTER INVENTORY
Included on Inventory.
EEC RISK (R) PHRASES
There are no known health hazards.
EEC SAFETY PHRASES
Use only in well ventilated areas (S51).
EEC SPECIAL PHRASES
Do not breathe spray (S23).
ILIA
AICS
Included on Inventory.

T CODE QE86A
DOCUMENT