



Solve 9342

Safety Data Sheet

Date Issued: 03/17/2016

Date Revised: 03/14/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: **Solve 9342** www.gowatersolve.com

Company Identification: WaterSolve, LLC
5031 68th Street
Caledonia, Michigan 49316, USA

For Product Information: 616-575-8693

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

Recommended use of the chemical and restrictions on use

29 CFR 1910.1200 (OSHA HazCom 2012)

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Skin irritation: **Category 2**

Specific target organ systemic

Toxicity – single exposure: **Category 3 (Central nervous system)**

Aspiration hazard: **Category 1**

GHS LABEL ELEMENT



Hazard pictograms:

Signal Word: **DANGER!**

Hazard Statements:

May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause drowsiness or dizziness.

Precautionary Statements:

PREVENTION:

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.

RESPONSE:

IF SWALLOWED:

Immediately call a POISON CENTER/doctor.

IF ON SKIN:

Wash with plenty of soap and water.

IF INHALED:

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

Do NOT induce vomiting.

If skin irritation occurs:

Get medical advice/attention. Take off contaminated clothing and wash before reuse.

STORAGE:

Store in a well-ventilated place. Keep container tightly closed.

DISPOSAL: Store locked up.
Dispose of contents/container to an approved waste disposal plant.
OTHER HAZRDS: Static Accumulating liquid

3. **COMPOSITION/INFORMATION ON INGREDIENTS**

Substance/Mixture: Mixture
Chemical nature: Defatter

Hazardous or Regulated Components

Chemical Name	CAS#	Classification	CONCENTRATION %
ALIPHATIC HYDROCARBON	254504001-5164	Flam. Liq. 4; H227 Skin Irrit. 2; H315 STOT SE 3; H336	>=20.00 - < 30.00
ALKANOL POLYALKOXYLATE	254504001-5531	Acute Tox. 4; H302 Eye Irrit. 2A; H319	>= 1.50 - < 5.00

Trade Secret Composition- Conceal the Identity + Concentration

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. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.

If swallowed: Obtain medical attention. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to a drowsy or unconscious person. If possible, do not leave individual unattended. If symptoms persist, call a physician.

In case of Skin Contact: Remove contaminated clothing and shoes without delay. If irritation develops, get medical attention. It is recommended that exposed areas be cleaned by washing with soap and water. Do not reuse contaminated clothing without laundering.

In case of Eye Contact: Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.

If Inhalation: Move to fresh air. If unconscious place in recovery position and seek medical advice. Consult a physician after significant exposure.

Most important symptoms and effects, both acute and delayed:

- Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.
- This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 – Swallowing) when deciding whether to induce vomiting.
- Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: May be fatal if swallowed and enters airways. Stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), lung irritation, drowsiness, confusion, irregular heartbeat, convulsions. Causes skin irritations. May cause drowsiness or dizziness.

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

5. **FIRE FIGHTING MEASURES**

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, foam, carbon dioxide or dry chemical.

Unsuitable extinguishing media: High volume water jet.

Specific hazards during firefighting:

If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products:

Carbon dioxide and carbon monoxide, Hydrocarbons, Nitrogen oxides (NOx), toxic fumes

Specific extinguishing methods: Product is compatible with standard fire-fighting agents.

Further information: When product is wet it causes a danger for slipping. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special Protective Equipment for fire-fighters:

Firefighters, and others exposed, wear self-contained breathing apparatus and protective suit. Wear full firefighting protective clothing. Use NIOSH/MSHA approved respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Ensure adequate ventilation. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Material can create slippery conditions.

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. Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up:

Keep in suitable, closed containers, for disposal. Soak up with inert absorbent material, (e.g. sand, silica gel, acid binder, universal binder, sawdust).

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

7. HANDLING AND STORAGE

ADVICE ON SAFE HANDLING:

Avoid formation of aerosol. Provide sufficient air exchange and /or exhaust in work rooms. Do not breathe vapours/dust. Do not smoke. Avoid exposure-obtain special instructions before use. Avoid contact with skin and eyes. Container hazardous when empty. Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and / or solid), all hazard precautions given in the data sheet must be observed. This material is slippery when wet. Eating , drinking, or smoking should be prohibited in the application area. For personal protection (see Section 8). Dispose of rinse water in accordance with local and state and national regulations. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

CONDITIONS FOR SAFE STORAGE:

Keep container tightly closed in a dry and well-ventilated place. Keep away from food and drink. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations/working materials must comply with the technological safety standards. Store in original container in a cool, dry ventilated area.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

COMPONENTS	CAS-No.	Value type (form of exposure)	Control parameters/permissible concentration	Basis
ALIPHATIC HYDROCARBON	254504001-5164	TWA	200 mg/m ³ Non-aerosol (as total hydrocarbon vapor)	ACGIH
		REL	100 mg/m ³	NIOSH/GUIDE

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. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Avoid contact with skin and eyes. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation.

Personal protective equipment**Respiratory protection:**

In case of vapour formation use a respirator with an approved filter. A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Hand protection:

Wear resistant gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

Not required under normal conditions of use. Wear tightly fitting splash-proof safety goggles if there is a potential for exposure of the eyes to liquid, vapor or mist. Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection

Wear as appropriate impervious clothing, safety shoes. Choose body protections according to the amount and concentration of the dangerous substances at the work place. Launder clothing before reuse. Discard gloves that show tears, pinholes, or signs of wear. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use. Wear resistant gloves.

Hygiene measures: Wash hands before breaks and at the end of the workday. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES**General Information**

Physical state:	liquid
Color:	white
Odor:	No data available
Odour threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Boiling Point boiling range:	> 414 °F / 212 °C (1013hPa)
Flash point:	200.8°F/ 93.8°C
Evaporation Rate:	< 1 n-Butyl Acetate
Flammability (solid, gas):	No data available
Flammability (liquids):	Static Accumulating liquid
Explosive properties:	7 % (V) Calculated Explosive Limit
Lower / upper limits:	0.6 % (V) Calculated Explosive Limit
Vapor Pressure:	23.333333 hPa (20°C) Calculated Vapor pressure
Relative vapor density:	No data available
Relative density:	ca. 1.1 (25 °C)
Density:	ca. 1.05 g/cm ³
Solubility in Water:	Soluble
Solubility in other solvents:	No data available
Partition coefficient (n-octanol/water):	No data available
Thermal decomposition:	No data available

Viscosity, dynamic No data available
Viscosity, kinematic No data available
Oxidizing properties: No data available

10. **STABILITY AND REACTIVITY**

Reactivity: No decompositions if stored and applied as directed.
Chemical Stability: Stable under recommended storage conditions.
Possibility of Hazardous reactions: Product will not undergo hazardous polymerization.
Conditions to avoid: Protect from frost, heat, flames and sparks.
Incompatible Materials: strong acids, strong oxidizers agents, halogens, strong reducing agents.
Hazardous decomposition products: Carbon dioxide, carbon monoxide, hydrocarbons

11. **TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure: Inhalation, skin absorption, skin contact, eye contact, ingestion

Acute toxicity: Not classified based on available information.

Components:

ALIPHATIC HYDROCARBON:

Acute oral Toxicity: LD 50 Rat: > 5,000 mg/kg
Acute inhalation toxicity: LD 50 Rat, male and female: > 5.28 mg/l
Exposure time: 4 hr.
Test atmosphere: vapour
Method: OECD Test Guideline 403

Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

Acute dermal toxicity: LD 50 Rabbit: > 2,000 mg/kg

Assessment: No adverse effect has been observed in acute dermal toxicity tests.

ALKANOL POLYALKOXYLATE:

Acute oral toxicity: LD 50 Rat: 1,940 mg/kg
Acute dermal toxicity: LD 50 (Rat): > 2,000 mg/kg

Skin corrosion/irritation: Causes skin irritation.

Product:

Remarks: May cause skin irritation and/or dermatitis.

Result: Repeated exposure may cause skin dryness or cracking.

Components:

ALIPHATIC HYDROCARBON:

Result: Irritating to skin.

ALKANOL POLYALKOXYLATE:

Result: Not irritating to skin.

Serious eye damage/eye irritation:

Not classified based on available information.

Product:

Remarks: Vapors may cause irritation to the eyes, respiratory system and the skin.

Components:

ALIPHATIC HYDROCARBON:

Result: Mildly irritating to eyes.

ALKANOL POLYALKOXYLATE:

Result: Irritating to eyes.

Respiratory or skin sensitization:

Skin sensitization:

Not classified based on available information

Respiratory sensitization:

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:

ALIPHATIC HYDROCARBON: May cause drowsiness or dizziness.
STOT – repeated exposure: Not classified based on available information
Aspiration toxicity: May be fatal if swallowed and enters airways.
Product: May be fatal if swallowed and enters airways.

Further information

Product: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

Carcinogenicity:

IARC: No component of this product presents 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 presents at levels greater than or equal to 0.1 % is identified as carcinogen or potential carcinogen by OSHA.

NTP: No component of this product presents at levels greater than or equal to 0.1 % is identified as a known or anticipated carcinogen by NTP.

12. **ECOLOGICAL INFORMATION**

Ecotoxicity

Product:

Toxicity to fish: LC 50 Rainbow trout (*Oncorhynchus mykiss*) 67.0 mg/l
Exposure time: 96hr. Test type: static test
Remarks: Based on a similar product formulation

LC 50 Fathead minnow (*Pimephales promelas*) 4.3 mg/l
Exposure time: 96hr. Test type: static test
Remarks: Based on a similar product formulation

**Toxicity of daphnia and other
Aquatic invertebrates:**

LC 50 Water flea (*Daphnia magna*): 1.6 mg/l
Exposure time: 48hr. Test Method: static test
Remarks: Based on a similar product formulation

Ecotoxicology Assessment

Acute aquatic toxicity:

Acute aquatic toxicity Category 2; Toxic to aquatic life.

Chronic aquatic toxicity:

Chronic aquatic toxicity Category 2; Toxic to aquatic life with long lasting effects.

Components:

ALIPHATIC HYDROCARBON:

Toxicity to fish:

LC 50 Rainbow trout (*Oncorhynchus mykiss*) 2 - 5 mg/l
Exposure time: 96hr. Test Method: semi-static test
Test substance: WAF Method: OECD Test Guideline 203

The information given is based on data obtained from similar substances.

Toxicity of daphnia and other

Aquatic invertebrates:

EL 50 Water flea (*Daphnia magna*): 1.4 mg/l
Exposure time: 48hr. Test Method: static test

Test substance: WAF Method: OECD Test Guideline 202

The information given is based on data obtained from similar substances.

Toxicity to Algae:

EL50 green algae (*Pseudokirchneriella subcapitata*): >1-3 mg/l
Exposure time: 72hr. Test Method: static test
Test substance: WAF Method: OECD Test Guideline 201

The information given is based on data obtained from similar substances.

Toxicity of daphnia and other Aquatic invertebrates (Chronic toxicity) :

NOEL Water flea (*Daphnia magna*): 0.48 mg/l
Exposure time: 21 d Test Method: semi-static test
Test substance: WAF Method: OECD Test Guideline 211

The information given is based on data obtained from similar substances.

ALKANOL POLYALKOXYLATE:

Toxicity to fish: LC50 Zebra Fish(*Danio rerio*) : 1 – 10 mg/l
Exposure time: 96h

Toxicity of daphnia and other Aquatic invertebrates: EC50 Water flea (*daphnia magna*): 5 – 10 mg/l
Exposure time: 48h

Toxicity to bacteria: EC50: > 1,000 mg/l

Persistence and degradability

Product:

Biochemical Oxygen Demand (BOD): Biochemical oxygen demand 548,000 mg/l
Chemical Oxygen Demand (COD): 2,176,000 mg/l Method: Chemical oxygen demand

Components:

ALIPHATIC HYDROCARBON:

Biodegradability: Result: Inherently biodegradable
Biodegradation: 58.6% Exposure time: 28 days
Method: OECD Test Guideline 301F

ALKANOL POLYALKOXYLATE:

Biodegradability: Biodegradation: 50 – 70%
Exposure time: 28d

Dissolved organic carbon (DOC): 540 mg/g
Chemical Oxygen Demand (COD): 2,170 mg/l Method: Chemical Oxygen demand

Bioaccumulative potential

Components: No data available

Mobility in soil

Components: No data available

Other adverse effects: No data available

Components: No data available

Product:

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

Components:

13. DISPOSAL CONSIDERATIONS

Disposal methods:

General Advice: The product should not be allowed to enter drains, water courses or the soil. 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.

14. TRANSPORT INFORMATION

International Transport Regulations

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT /LTD. QTY.
U.S. DOT -ROAD					Not dangerous goods
U.S. DOT - RAIL					Not dangerous goods
U.S. DOT – INLAND WATERWAYS					Not dangerous goods
TRANSPORT CANADA - ROAD					Not dangerous goods
TRANSPORT CANADA - RAIL					Not dangerous goods
TRANSPORT CANADA – INLAND WATERWAYS					Not dangerous goods
INTERNATIONAL MARITIME DANGEROUS GOODS					Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOC. - CARGO					Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOC. - PASSENGER					Not dangerous goods
MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES					Not dangerous goods

*ORM = ORM-D, CBL=COMBUSTIBLE LIQUID

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

15. REGULATORY INFORMATION

SARA 311/312

Acute health hazard

SARA 313 Components

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.

California Prop. 65-

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

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

- TSCA: On TSCA Inventory
- DSL: All components of this product are on the Canadian DSL.
- AUSTR: On the inventory, or in compliance with the inventory.
- ENCS: On the inventory, or in compliance with the inventory.
- KECL: On the inventory, or in compliance with the inventory.
- PHIL: On the inventory, or in compliance with the inventory.
- IECSC: On the inventory, or in compliance with the inventory.
- NZIOC: On the inventory, or in compliance with the inventory.

Inventories:

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

Registration: Trade Secret

Chemical Name	IDENTIFICATION NUMBER
ALIPHATIC HYDROCARBON	254504001-5164

ALKANOL POLYALKOXYLATE	254504001-5531
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16. OTHER INFORMATION

HMIS / NFPA	HEALTH	FLAMMABILITY	Instability/physical hazard	other
	2	1	0	No data

NFPA Flammable and Combustible Liquids Classification
Combustible Liquid Class III B

Full text of H-Statements referred to under Sections 2 and 3.

H-227	Combustible liquid.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

DATE ISSUED: 03/14/2016**DATE REVISED: 03/14/2016****Revision number: 1.4****OTHER INFORMATION**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This information is for the specific material described only and may not be valid if the material is used in combination with any other materials or in any process. The user is responsible to determine the completeness of the information and suitability for the user's own particular use. The knowledge and belief of the company, the information is accurate and reliable as of the date indicated but the company makes no express or implied warranty of merchantability for the material or the information. The company makes no express or implied warranty of fitness for a purpose for the material or for the information. Users of any chemical should educate themselves on all aspects of its use by independent investigation of current scientific and medical knowledge that the material can be used safely. Both the supplier and manufacturer make no representations and assume no liability for any direct, incidental or consequential damages resulting from its use. Both the supplier and manufacturer make no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This information is for the specific material described only and may not be valid if the material is used in combination with any other materials or in any process. The user is responsible to determine the completeness of the information and suitability for the user's own particular use. Users of any chemical should educate themselves on all aspects of its use by independent investigation of current scientific and medical knowledge that the material can be used safely. The buyer assumes all responsibility for using and handling the product in accordance with applicable federal, state and local regulations.

List of abbreviations and acronyms that could be, but not necessarily are, used in the safety data sheet:

ACGIH: American Conference of Industrial Hygienists
 BEI: Biological Exposure Index
 CAS: Chemical Abstracts Service (Division of the American Chemical Society)
 CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
 CMR: Carcinogenic, Mutagenic or Toxic for Reproduction
 DOT: Department of Transportation
 FG: Food grade
 FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals
 H-statement: Hazard Statement
 HMIRC: Hazardous Materials Information Review Commission

HMIS: Hazardous Materials Identification System
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulation by the “International Air Transport Association” (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI (ICAO): Technical Instructions by the “International Civil Aviation Organization”
IMDG: International Maritime Code for Dangerous Goods
ISO: International Organization for Standardization
logPow: octanol-water partition coefficient
LCxx: Lethal Concentration, for xx percent of test population
LDxx: Lethal Dose, for xx percent of test population
ICxx: Inhibitory Concentration for xx of a substance
ECxx: Effective Concentration of xx
N.O.S.: Not otherwise Specified
NFPA: National Fire Protection Association
NIOSH: National Institute for Occupational Safety and Health
OECD: Organization for Economic Co-operation and Development
OEL: Occupational Exposure Limit
OSHA: Occupational Safety and Health Administration
P-Statement: Precautionary Statement
PBT: Persistent, Bioaccumulative and Toxic
PMRA: Health Canada Pest Management Regulatory Agency
PPE: Personal Protective Equipment
RTK: Right to Know
STEL: Short-term exposure limit
SDS Safety Data Sheet
STOT: Specific Target Organ Toxicity
TLV: Threshold Limit Value
TWA: Time-weighted average
VPVB: Very Persistent and Very Bioaccumulative
WEL: Workplace Exposure Level
WHMIS: Workplace Hazardous Materials Information System
(WAF): water-accommodated fraction