american gas & chemical co. ltd.
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Safety Data Sheet

Issue Date: 13-Mar-2017 **Revision Date:** 06-Nov-2023 **Version** 1

1. IDENTIFICATION

Product Identifier

Product Name Color Change Developer for Hydro 2

Other means of identification

SDS # AGC-269-1

Product Code Hydro 1
UN/ID No none
Other Information Package type: Metal can

Recommended use of the chemical and restrictions on use

Recommended Use Leak Detection Spray Bulk

Details of the supplier of the safety data sheet

Manufacturer Address
AMERICAN GAS & CHEMICAL COMPANY, LTD
220 Pegasus Avenue
Northvale NJ 07647

Emergency Telephone Number

Company Phone Number Phone: 201-767-7300 Fax: 201-767-1741
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Opaque Light Orange Suspension **Physical State** Liquid **Odor** Sweet odor

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Eye irritation	Category 2
Skin Corrosion/Irritation	Category 3

Signal Word
Warning

Hazard Statements
Harmful if inhaled
May cause an allergic skin reaction
May cause eye irritation

Avoid breathing dust/fume/gas/mist/vapors/spray
Keep container tightly closed
Wash skin thoroughly after handling
Use only outdoors or in a well-ventilated area
Do not eat, drink or smoke when using this product
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of soap and water.
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.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary Statements - Disposal
Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

Precautionary Statements - Storage
Store locked up
Protect from sunlight. Store in a well-ventilated place

Hazards Not Otherwise Classified (HNOC)

Harmful if swallowed or inhaled
May cause an allergic skin reaction
May cause eye irritation
May cause drowsiness or dizziness
Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
1,2-trans-Dichloroethylene	156-60-5	<60
Proprietary Fluorinated Solvent	Trade Secret	<40

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

Skin Contact Wash with soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation Remove person to fresh air. If you feel unwell, get medical attention.

Ingestion Do not induce vomiting. Call a physician immediately. Potential for aspiration if swallowed.

Most important symptoms and effects

Symptoms High vapor concentrations are irritating to the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects. Prolonged or repeated skin contact tends to remove skin oils possibly leading to irritation and dermatitis. Contact may cause eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Non-combustible. Use a fire fighting agent suitable for surrounding fire. In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Exposure to extreme heat can give rise to thermal decomposition.

Hazardous Decomposition or By-Products Hydrogen fluoride (HF), carbonyl fluoride, carbon monoxide and carbon dioxide

Protective equipment and precautions for firefighters

When fire fighting conditions are severe and total thermal decomposition of the product is possible, wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Remove all sources of ignition. Use personal protective equipment as required. Ventilate confined spaces.

Environmental Precautions Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Contain and collect with an inert absorbent and place into an appropriate container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Use personal protection recommended in Section 8. Avoid breathing vapors or mists. Use only in well-ventilated areas. Contaminated work clothing should not be allowed out of the workplace. Avoid prolonged or repeated contact with skin. Do not get in eyes. Do not puncture or incinerate cans.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, and flame. Store away from incompatible materials. Do not store above the following temperature: 35°C (95°F).

Incompatible Materials Strong oxidizers. Alkalis or alkaline earth metals powdered Al, Zn, Be, etc.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,2-trans-Dichloroethylene 156-60-5	TWA: 200 ppm	-	-
Proprietary Fluorinated Solvent	TWA: 50 ppm	-	-

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use splash goggles or face shield when contact may occur. Provide eyewash, quick drench.

Skin and Body Protection For prolonged or repeated skin contact use suitable protective gloves. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory Protection Use supplied-air respiratory protection in confined or enclosed spaces.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid		
Appearance	Opaque light orange suspension	**Odor**	Sweet odor
Color	Opaque light orange	**Odor Threshold**	Not determined

Property	Values	Remarks • Method
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	44.6°C / 112°F	
Flash Point	None	
Evaporation Rate	70 [Ref Std: BUOAC=1]	(Water = 1)
Flammability (Solid, Gas)	Non-flammable aerosol	
Upper Flammability Limits	None	
Lower Flammability Limit	None	
Vapor Pressure	517 mm Hg	@ 20°C (68°F)
Vapor Density	4.8	(Air=1)
Specific Gravity	1.37	@ 20°C (68°F)
Water Solubility	Insoluble in water	
Solubility in other solvents	Slight (less than 10%)	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	0.43 centipoise [@ 25 ºC]	
Volitile Organic Compounds	685 g/l	
Explosive Properties	Not determined	
Percent Volatile	98%	

10. STABILITY AND REACTIVITY

Reactivity This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

Chemical Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid Keep out of reach of children. Heat.

Incompatible Materials Strong oxidizers. Alkalis or alkaline earth metals powdered Al, Zn, Be, etc.

Hazardous Decomposition Products Decomposition of this product at temperature above 300° C can form Hydrogen Fluoride (HF), but HF will only accumulate with continuous exposure to excess heat in a sealed vessel.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact May be harmful in contact with skin. May cause an allergic skin reaction. Causes mild skin irritation.

Inhalation Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Ingestion Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50	Ingestion
1,2-trans-Dichloroethylene 156-60-5	= 1235 mg/kg (Rat)	> 5 g/kg (Rabbit)	-	7,902 mg/kg (Rat)
Proprietary Fluorinated Solvent	>2,000mg/kg	>2,000mg/kg	>24.8mg/L (3,000 ppm)	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Not classifiable as a human carcinogen.

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,2-trans-Dichloroethylene 156-60-5		135: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 1142 mg/L 5 min EC50 = 1546 mg/L 30 min	
Proprietary Fluorinated Solvent	ErC50>213mg/L EbC50>213mg/L	LC50 (96 hr) (Carp) >76mg/L	EC50>94mg/L – 48hr	

Persistence/Degradability Not determined.

Bioaccumulation Not determined.

Mobility

Chemical Name	Partition Coefficient
1,2-trans-Dichloroethylene 156-60-5	1.48

Other Adverse Effects Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
1,2-trans-Dichloroethylene 156-60-5	U079	Included in waste streams: F024, F025, F039, K073		U079
Chemical Name	**RCRA - Halogenated Organic Compounds**	**RCRA - P Series Wastes**	**RCRA - F Series Wastes**	**RCRA - K Series Wastes**
1,2-trans-Dichloroethylene 156-60-5	Category I - Volatiles		Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	

California Hazardous Waste Status

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

TSCA Listed

Legend:

TSCA *- United States Toxic Substances Control Act Section 8(b) Inventory*

DSL/NDSL *- Canadian Domestic Substances List/Non-Domestic Substances List*

EINECS/ELINCS *- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

ENCS *- Japan Existing and New Chemical Substances*

IECSC *- China Inventory of Existing Chemical Substances*

KECL *- Korean Existing and Evaluated Chemical Substances*

PICCS *- Philippines Inventory of Chemicals and Chemical Substances*

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
1,2-trans-Dichloroethylene 156-60-5	1000 lb 1 lb		RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ

SARA 313

SARA 311/312 Acute: Yes Chronic: No Reactive: Yes Sudden Release: No

SARA 302 Not regulated

SARA 304 Not regulated

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
1,2-trans-Dichloroethylene 156-60-5 (<35)			X	

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
1,2-trans-Dichloroethylene 156-60-5		X	X

16. OTHER INFORMATION

NFPA	**Health Hazards**	**Flammability**	**Instability**	**Special Hazards**
	2	0	0	Not determined
HMIS	**Health Hazards**	**Flammability**	**Physical Hazards**	**Personal Protection**
	2	0	0	B

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End of Safety Data Sheet