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SAFETY DATA SHEET

1. Identification

Product identifier DUALITE U020-125W

Other means of identification

Tariff code 3906.90.2000

Recommended use Not available.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Chase Corporation Specialty Chemical Intermediates

Address 9 Furman Hall Court

Greenville, SC 29609

United States

Telephone General Assitance 1-800-323-4182

E-mail Not available.

Emergency phone number Chemtrec (US - 24 hrs) 800-424-9300 Chemtrec (Int'l - 24 hrs) 703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 2B

Reproductive toxicity Category 2

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Specific target organ toxicity, repeated Category 2

exposure

Aspiration hazard Category 1

Environmental hazards Hazardous to the aquatic environment, acute Category 2

hazard

Hazardous to the aquatic environment, Category 3

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May be fatal if swallowed and enters airways. Causes eye irritation. May cause respiratory

irritation. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Harmful to aquatic life with long

lasting effects.

Material name: DUALITE U020-125W 2983 Version #: 01 Issue date: 02-28-2019

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear

protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If inhaled: Response

> Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. If eye irritation persists: Get medical

advice/attention.

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

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Vinylidenechloride	·	75-35-4	< 1
TOLUENE		108-88-3	< 0.3
Other components below re	eportable levels		90 - 100

Monomer

Chemical name	Common name and synonyms	CAS number	%
Vinylidenechloride		75-35-4	<= 1
Acrylonitrile		107-13-1	<= 0.01

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison

center or doctor/physician if you feel unwell.

Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If Ingestion

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important

symptoms/effects, acute and

delayed

Aspiration may cause pulmonary edema and pneumonitis. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. May cause respiratory irritation. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special

treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation.

Symptoms may be delayed.

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice **General information** (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in

attendance.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Unsuitable extinguishing media

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

and precautions for firefighters Fire fighting

Use water spray to cool unopened containers.

equipment/instructions

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

The product is immiscible with water and will spread on the water surface. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Specifically Regulated S Monomer	Substances (29 CFR 1910.100 Type	1-1050) Value	
Acrylonitrile (CAS 107-13-1)	STEL	10 ppm	
	TWA	2 ppm	
US. OSHA Table Z-2 (29 CFR 1910.	1000)		
Components	Туре	Value	
TOLUENE (CAS 108-88-3)	Ceiling	300 ppm	
	TWA	200 ppm	
US. ACGIH Threshold Limit Values	;		
Components	Туре	Value	
TOLUENE (CAS 108-88-3)	TWA	20 ppm	
Vinylidenechloride (CAS 75-35-4)	TWA	5 ppm	
Monomer	Туре	Value	
Acrylonitrile (CAS 107-13-1)	TWA	2 ppm	
US. NIOSH: Pocket Guide to Chem	ical Hazards		
Components	Туре	Value	
TOLUENE (CAS 108-88-3)	STEL	560 mg/m3	
		150 ppm	
	TWA	375 mg/m3	
		100 ppm	

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US. NIOSH: Pocket Guide to Chemical Hazards

Monomer	Туре	Value	
Acrylonitrile (CAS 107-13-1)	Ceiling	10 ppm	
	TWA	1 ppm	

Biological limit values

Components	Value	Determinant	Specimen	Sampling Time
TOLUENE (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*

^{* -} For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Acrylonitrile (CAS 107-13-1)

Can be absorbed through the skin.

TOLUENE (CAS 108-88-3)

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Acrylonitrile (CAS 107-13-1)

Skin designation applies.

TOLUENE (CAS 108-88-3)

Skin designation applies.

US ACGIH Threshold Limit Values: Skin designation

Acrylonitrile (CAS 107-13-1)

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Acrylonitrile (CAS 107-13-1)

Can be absorbed through the skin.

Appropriate engineering

controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Solid. **Physical state Form** Powder. Color Light yellow. Odor Characteristic. **Odor threshold** Not available. Not available. Melting point/freezing point Not available. Initial boiling point and boiling Not available. range Not available. Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Not available.

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Density 1.10 g/cm3 (dried powder) estimated

Explosivity Dust Explosion hazard. Lowest explosion concentration approximately 50 g/m3

Oxidizing properties Not oxidizing.

pH in aqueous solution 7 - 9 estimated

Softening point 176 °F (80 °C) estimated

Specific gravity 1.1 (dried powder) estimated

VOC 10 % estimated

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with

incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected.

Eye contact Causes eye irritation.

Ingestion Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious

chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Aspiration may cause pulmonary edema and pneumonitis. Irritation of eyes. Exposed individuals

may experience eye tearing, redness, and discomfort. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

 Components
 Species
 Test Results

 TOLUENE (CAS 108-88-3)

Acute Dermal

LD50 Rabbit 12120 mg/kg

Oral

LD50 Rat 2.6 g/kg

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Components Species Test Results

Vinylidenechloride (CAS 75-35-4)

Acute Oral

LD50 Rat 80 mg/kg

Monomer Species Test Results

Acrylonitrile (CAS 107-13-1)

<u>Acute</u> Dermal

LD50 Rat 148 mg/kg

Vinylidenechloride (CAS 75-35-4)

Acute Oral

LD50 Rat 80 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

Acrylonitrile (CAS 107-13-1) 2B Possibly carcinogenic to humans.

TOLUENE (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

Vinylidenechloride (CAS 75-35-4) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Acrylonitrile (CAS 107-13-1) Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

Acrylonitrile (CAS 107-13-1) Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Specific target organ toxicity -

single exposure

May cause respiratory irritation.

Specific target organ toxicity -

repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard May be fatal if swallowed and enters airways.

Chronic effects Prolonged inhalation may be harmful. May cause damage to organs through prolonged or

repeated exposure. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Product		Species	Test Results
MATSUMOTO MICRO	OSPHERE F20		
Aquatic			
Crustacea	EC50	Daphnia	3454.9187 mg/l, 48 hours estimated
Fish	LC50	Fish	10691.8096 mg/l, 96 hours estimated
Components		Species	Test Results
TOLUENE (CAS 108-	88-3)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 mg/l, 96 hours

Components **Test Results Species**

Vinylidenechloride (CAS 75-35-4)

Aquatic

Fish LC50 Bluegill (Lepomis macrochirus) 57 - 91 mg/l, 96 hours

Test Results Monomer **Species**

Acrylonitrile (CAS 107-13-1)

Aquatic

Crustacea EC50 Water flea (Daphnia magna) 7.38 mg/l, 48 hours Fish LC50 Fathead minnow (Pimephales promelas) 6.7 - 15 mg/l, 96 hours

Vinylidenechloride (CAS 75-35-4)

Aquatic

Fish LC50 Bluegill (Lepomis macrochirus) 57 - 91 mg/l, 96 hours

No data is available on the degradability of any ingredients in the mixture. Persistence and degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

TOLUENE 2.73 Vinylidenechloride 2.13

Mobility in soil No data available.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation

potential.

13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the **Disposal instructions**

> material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] Hazardous waste code

D029: Waste 1,1-Dichloroethylene

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

UN2211 **UN** number

UN proper shipping name Transport hazard class(es)

Polymeric beads, expandable, evolving flammable vapor

Class 9 Subsidiary risk Label(s)

9 Ш Packing group

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

32, IB8, IP3, IP7, T1, TP33 **Special provisions**

155 Packaging exceptions 221 Packaging non bulk Packaging bulk 221

IATA

UN number UN2211

Polymeric beads, expandable evolving flammable vapour **UN** proper shipping name

Transport hazard class(es)

Class 9

Subsidiary risk Packing group Ш **Environmental hazards** No. **ERG Code** 9L

Other information

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Passenger and cargo

aircraft

Allowed with restrictions.

Allowed with restrictions. Cargo aircraft only

IMDG

UN2211 **UN** number

UN proper shipping name Transport hazard class(es) POLYMERIC BEADS, EXPANDABLE evolving flammable vapour

9 Class Subsidiary risk Packing group Ш

Environmental hazards

Marine pollutant No. F-A, S-I

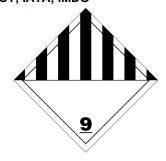
EmS Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to

Not applicable.

Annex II of MARPOL 73/78 and the IBC Code

DOT; IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acrylonitrile (CAS 107-13-1) Listed. **TOLUENE (CAS 108-88-3)** Listed. Vinylidenechloride (CAS 75-35-4) Listed.

SARA 304 Emergency release notification

2-PROPENENITRILE (CAS 107-13-1) 100 LBS OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Acrylonitrile (CAS 107-13-1) Cancer

Central nervous system

Liver

Skin sensitization Skin irritation Respiratory irritation Eye irritation Acute toxicity

Flammability

Material name: DUALITE U020-125W

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical name **Threshold Threshold Threshold** CAS number Reportable quantity planning quantity planning quantity, planning quantity, (pounds) (pounds) lower value upper value (pounds) (pounds)

10000 Acrylonitrile 107-13-1 100

SARA 311/312 Hazardous

No (Exempt)

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
Vinylidenechloride	75-35-4	< 1	
Vinylidenechloride	75-35-4	<= 1	

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Acrylonitrile (CAS 107-13-1) **TOLUENE (CAS 108-88-3)** Vinylidenechloride (CAS 75-35-4)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Acrylonitrile (CAS 107-13-1) Vinylidenechloride (CAS 75-35-4)

Safe Drinking Water Act

Contains component(s) regulated under the Safe Drinking Water Act.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and **Chemical Code Number**

TOLUENE (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

TOLUENE (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

TOLUENE (CAS 108-88-3) 594

US state regulations

California Proposition 65



WARNING: This product can expose you to chemicals including Vinylidenechloride: Vinylidenechloride, which is known to the State of California to cause cancer, and TOLUENE, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Acrylonitrile (CAS 107-13-1) Listed: July 1, 1987 Vinylidenechloride (CAS 75-35-4) Listed: December 29, 2017

California Proposition 65 - CRT: Listed date/Developmental toxin

TOLUENE (CAS 108-88-3) Listed: January 1, 1991

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Acrylonitrile (CAS 107-13-1) **TOLUENE (CAS 108-88-3)** Vinylidenechloride (CAS 75-35-4)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No

Material name: DUALITE U020-125W 2983 Version #: 01 Issue date: 02-28-2019 Country(s) or region Inventory name On inventory (yes/no)*

New Zealand New Zealand Inventory

Philippines Philippine Inventory of Chemicals and Chemical Substances No

(PICCS)

Taiwan Taiwan Chemical Substance Inventory (TCSI) No

Toxic Substances Control Act (TSCA) Inventory United States & Puerto Rico No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 02-28-2019

Version # 01

Health: 3* **HMIS®** ratings

Flammability: 0

Physical hazard: 0

Health: 2 NFPA ratings

Flammability: 0 Instability: 0

The information offered in this data sheet is designed only as guidance for the safe use, storage **Disclaimer**

and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication, however, no guarantee is made to its accuracy. This information 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 other process. This material is intended for industrial use only.

No warranty, expressed or implied is made.