

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Mixture  
Product name : Jet 5  
Product code : SY 042 C1255  
Type of formulation : Soluble concentrate (SL)  
Active Ingredient : Peracetic acid

**1.2. Relevant identified uses of the substance or mixture and uses advised against****2.1. Relevant identified uses**

Main use category : Plant protection product for professional use. Agriculture.  
Use of the substance/mixture : Disinfectant.

**1.2.2. Uses advised against**

No additional information available.

**1.3. Details of the supplier of the safety data sheet**Supplier:

SOLVAY

Rue de Ransbeek, 310

B-1120 Bruxelles

Tel: +32 (0) 2 264 21 11

Fax : +32 2 264 18 02

Distributor:

CERTIS UK

1 Riverside

Granta Park

Great Abington

Cambridgeshire CB21 6AD

United Kingdom

Tel: +44 (0)845 373 0305

Fax: +44 (0)1223 891210

Email: [certis@certiseurope.co.uk](mailto:certis@certiseurope.co.uk)

Website: [www.certiseurope.co.uk](http://www.certiseurope.co.uk)

**1.4. Emergency telephone number**

Emergency number : Certis Carechem24 multilingual 24 hours emergency number: +44 (0) 870 190 6777.  
For advice on medical emergencies, fires, spillages or chemical hazards only –phone: 0870 190 6777.  
For further advice for medical professionals - The National Poisons Information Service:  
Tel: 0870 600 6266 (UK only) or Dublin Tel: 00 35 3 137 99 64/379966.  
For further advice for veterinary surgeons: 020 7635 9195.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

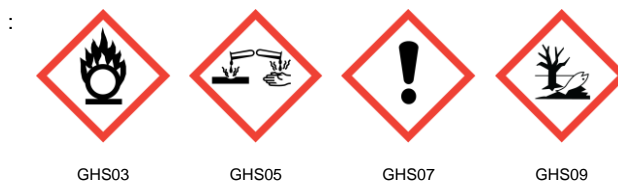
Ox. Liq. 2	H272
Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Dermal)	H312
Acute Tox. 4 (Inhalation)	H332
Skin Corr. 1A	H314
Eye Dam. 1	H318
STOT SE 3	H335
Aquatic Chronic 1	H410

Full text of H-phrases: see section 16.

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H272 - May intensify fire; oxidizer.  
 H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.  
 H314 - Causes severe skin burns and eye damage.  
 H335 - May cause respiratory irritation.  
 H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 P221 - Take any precaution to avoid mixing with combustibles.  
 P260 - Do not breathe vapours/spray.  
 P262 - Do not get in eyes, on skin, or on clothing.  
 P271 - Use only outdoors or in a well-ventilated area.  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.  
 P405 - Store locked up.  
 P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

EUH phrases

: EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Hydrogen peroxide	(CAS No) 7722-84-1 (EC no) 231-765-0 (EC index no) 008-003-00-9 (REACH-no) 01-2119485845-22	20	O; R8 Xn; R20/22 C; R35 R5
Acetic acid	(CAS No) 64-19-7 (EC no) 200-580-7 (EC index no) 607-002-00-6 (REACH-no) 01-2119475328-30	10	R10 C; R35
Paracetic acid	(CAS No) 79-21-0 (EC no) 201-186-8 (EC index no) 607-094-00-8 (REACH-no) 01-2119531330-56	5	O; R7 Xn; R20/21/22 C; R35 N; R50 R10
Alcohols, C6-12, ethoxylated	(CAS No) 68439-45-2	1	Xn; R22 Xi; R41

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrogen peroxide	(CAS No) 7722-84-1 (EC no) 231-765-0 (EC index no) 008-003-00-9 (REACH-no) 01-2119485845-22	20	Ox. Liq. 1, H271 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 STOT SE 3, H335 Aquatic Chronic 3, H412
Acetic acid	(CAS No) 64-19-7 (EC no) 200-580-7 (EC index no) 607-002-00-6 (REACH-no) 01-2119475328-30	10	Flam. Liq. 3, H226 Skin Corr. 1A, H314
Paracetic acid	(CAS No) 79-21-0 (EC no) 201-186-8 (EC index no) 607-094-00-8 (REACH-no) 01-2119531330-56	5	Flam. Liq. 3, H226 Org. Perox. D, H242 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Alcohols, C6-12, ethoxylated	(CAS No) 68439-45-2	1	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

Full text of R-, H- and EUH-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: In the event of any complaints or symptoms, avoid further exposure.
First-aid measures after inhalation	: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing, cover him and keep him warm. If symptoms persist call a doctor. Oxygen or artificial respiration if needed.
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of soap and water. Remove contaminated clothing and shoes. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for at least 15 minutes, also under eyelides. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
First-aid measures after ingestion	: IF SWALLOWED: Immediately call a POISON CENTER or doctor. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Artificial respiration and/or oxygen may be necessary.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: Severe respiratory irritant: breathing difficulties, cough, chemical pneumonitis, pulmonary oedema. Repeated or prolonged exposure may cause: Nose bleeding, chronic bronchitis.
Symptoms/injuries after skin contact	: The product is corrosive. Redness, swelling of tissue, burn.
Symptoms/injuries after eye contact	: The product is corrosive. May cause irreversible eye damage. Redness, Lachrymation, Swelling of tissue, Burn.
Symptoms/injuries after ingestion	: May cause severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. Nausea, Abdominal pain, Bloody vomiting, Diarrhoea, Suffocation, Cough, Severe shortness of breath. Risk of Respiratory disorder.

### 4.3. Indication of any immediate medical attention and special treatment needed

Take victim immediately to hospital. Immediate medical attention is required. Burns must be treated by a physician. Risk of shock. Medical supervision for minimum 48 hours.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray Dry chemical powder Alcohol resistant foam Carbon dioxide (CO <sub>2</sub> ).
Unsuitable extinguishing media	: Jet of water.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: May cause fire or explosion; strong oxidizer. Oxygen released in thermal decomposition may support combustion. Combustion or thermal decomposition may generate toxic vapours.
-------------	--

**5.3. Advice for firefighters**

- Firefighting instructions : Exercise caution when fighting any chemical fire.
- Fight fire from safe distance and protected location.
- Do not breathe fumes
- Cool closed containers exposed to fire with water spray
- If possible, take the containers out of dangerous zone.
- Contain fire-fighting water with dikes or absorbents to prevent migration and entry into sewers, streams or groundwater.
- Protection during firefighting : Wear suitable protective clothing, gloves, eye/face protection and respiratory protection
- Wear a self-contained breathing apparatus.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

- Protective equipment : Wear suitable protective clothing, gloves and eye/ face protection.
- Emergency procedures : Evacuate area.
- Ensure adequate ventilation.
- Avoid direct contact with the substance.
- Contain any spills with dikes or absorbents to prevent migration and entry into sewers, streams or groundwater.

**6.2. Environmental precautions**

- Prevent entry to sewers and public waters.
- Notify the authorities if product enters sewers or public waters.

**6.3. Methods and material for containment and cleaning up**

- Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.
- Once absorbed collect spilled material with shovels, buckets and place in closed containers and label properly.
- Remove as chemical waste, according to national or local legislation.
- In the event of major spillage: contact an expert.

**6.4. Reference to other sections**

- Refer to protective measures listed in Sections 7 and 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Read label before use.
- Use only in well-ventilated areas.
- Before all operations, passivate the piping circuits and vessels according to the procedure recommended by the producer.
- Use only clean and dry utensils. May not get in touch with organic materials.
- Avoid breathing mist or spray.
- Avoid contact with eyes, skin, nose and mouth.
- Wear suitable protective clothing, gloves and eye or face protection
- Keep away from heat/sparks/open flames/hot surfaces.
- Keep away from incompatible materials (SECTION 10.)
- Do not use sparking tools.
- Minimize static sparks/avoid flash fire.
- Do not smoke.
- Hygiene measures : Always wash your hands immediately after handling this product, and once again before leaving the workplace.
- Contaminated work clothing should not be allowed out of the workplace.
- Do not eat, drink or smoke when using this product.
- Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Prevent unauthorised access.
- Store in a cool, well-ventilated place
- Keep locked up and out of the reach of children.
- Keep in original containers, tightly closed.
- Keep away from food, drink and animal feedingstuffs.
- Keep in properly labelled containers.
- Keep away from heat/sparks/open flames/hot surfaces.
- Protect against frost.
- Do not smoke.

- Packing material : Stainless steel cleaned and passived . Approved grades of HDPE.

### 7.3. Specific end use(s)

Disinfectant for agricultural use. Refer to the label.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Paracetic acid (79-21-0)		
US	ACGIH Threshold Limit Values 02 2014	Short term exposure limit = 0.4 ppm


Paracetic acid (79-21-0)	
Other information on limit values	<p>Fresh water, 0.000224 mg/l</p> <p>Sewage treatment plants, 0.051 mg/l</p> <p>Fresh water sediment, 0.00018 mg/kg</p> <p>Soil, 0.320 mg/kg</p> <p>Workers, Inhalation, Systemic effects, Short-term exposure, Long-term exposure, 0.6 mg/m<sup>3</sup></p> <p>Workers, Inhalation, Local effects, Short-term exposure, Long-term exposure, 0.6 mg/m<sup>3</sup></p> <p>Workers, Dermal, Local effects, Short-term exposure, 0.12 %</p> <p>Consumers, Inhalation, Systemic effects, Short-term exposure, Long-term exposure, 0.6 mg/m<sup>3</sup></p> <p>Consumers, Inhalation, Local effects, Long-term exposure, 0.6 mg/m<sup>3</sup></p> <p>Consumers, Inhalation, Local effects, Short-term exposure, 0.3 mg/m<sup>3</sup></p> <p>Consumers, Dermal, Local effects, Short-term exposure, 0.12 %</p>

Hydrogen peroxide (7722-84-1)		
UK	EH40 Workplace Exposure Limits (WELs) 12 2011	time weighted average = 1 ppm time weighted average = 1.4 mg/m <sup>3</sup>
UK	EH40 Workplace Exposure Limits (WELs) 12 2011	Short term exposure limit = 2 ppm Short term exposure limit = 2.8 mg/m <sup>3</sup>
US	ACGIH Threshold Limit Values 02 2014	time weighted average = 1 ppm
Other information on limit values		<p>Fresh water, 0.0126 mg/l</p> <p>Marine water, 0.0126 mg/l</p> <p>Sewage treatment plants, 4.66 mg/l</p> <p>Intermittent use/release, 0.0138 mg/l</p> <p>Fresh water sediment, 0.047 mg/kg</p> <p>Marine sediment, 0.047 mg/kg</p> <p>Soil, 0.0023 mg/kg</p>

Acetic acid (64-19-7)		
US	ACGIH Threshold Limit Values 03 2013	time weighted average = 10 ppm
US	ACGIH Threshold Limit Values 03 2013	Short term exposure limit = 15 ppm
EU	Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents. 12 2009	time weighted average = 10 ppm time weighted average = 25 mg/m <sup>3</sup> Remarks: Indicative
Other information on limit values		

Alcohols, C6-12, ethoxylated (68439-45-2)		
US	ACGIH Threshold Limit Values	Remarks: none established

### 8.2. Exposure controls

Appropriate engineering controls	: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide appropriate exhaust ventilation at machinery.
Personal protective equipment	: Protective clothing. Protective goggles. Gloves. Dust/aerosol mask.
	
Hand protection	: Wear impervious gloves resistant to chemical. Butyl-rubber.
Eye protection	: Safety goggles or a face shield.
Skin and body protection	: Protective clothing with long sleeves waterproof and resistant to chemicals. Rubber boots.
Respiratory protection	: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators: Self-contained breathing apparatus (EN 133), Respirator with a vapour filter (EN 141), Recommended Filter type: ABEK-P2.
Hygiene measures	: Do not eat, drink or smoke while handling the product. Clean gloves with soap and water before removing. Wash hands and face with soap and water before eating, drinking or smoking. Clean equipment, premises and work clothes regularly. Work clothing should remain on the work area and stored separately from street clothes.
Environmental exposure controls	: Discharge into the environment must be avoided. Do not contaminate surface and groundwater.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: Pungent.
Odour threshold	: No data available
pH	: < 2
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: ca. -42 °C (calculated value)
Boiling point	: ca. 105 °C (calculated value)
Flash point	: 74 - 83 °C (closed cup)
Self ignition temperature	: No data available
Decomposition temperature	: >60 °C
Flammability (solid, gas)	: Not applicable. The product is not flammable. Heating may cause fire.
Vapour pressure	: ca. 32 hPa at 25 °C (calculated value)
Relative vapour density at 20 °C	: No data available
Relative density	: 1.1
Solubility	: Miscible with water Soluble in organic solvents. Slightly soluble. Aromatic solvents.
Log Pow	: log Pow: -1.25, Method: calculated value log Pow: -0.52, Method: measured value
Log Kow	: No data available
Viscosity, kinematic	: No data available



Viscosity, dynamic : No data available  
 Explosive properties : It is not explosive.  
 Oxidising properties : Oxidizer.  
 Explosive limits : No data available

### 9.2. Other information

Other properties : pKa1= 8,2 25 °C.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Decomposes on heating.  
 Heating may cause a fire.  
 Potential for exothermic hazard.

### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

### 10.3. Possibility of hazardous reactions

Contact with combustible material may cause fire.  
 Contact with flammables may cause fire or explosions.  
 Risk of explosion if heated under confinement.  
 Fire or intense heat may cause violent rupture of packages.

### 10.4. Conditions to avoid

Contamination.  
 To avoid thermal decomposition, do not overheat.

### 10.5. Incompatible materials

Acids, Bases, Metals, Heavy metal salts, Powdered metal salts, Reducing agents, Organic materials, Flammable materials

### 10.6. Hazardous decomposition products

Oxygen.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Harmful by inhalation, in contact with skin and if swallowed.

5 % PAA mixture	
LD50 oral rat	> 300 mg/kg
LD50 dermal rabbit	1.147 mg/kg
LC50 inhalation rat	4.08 mg/l/4h

Irritation : Not classified  
 Rabbit: Corrosive to skin.  
 Risk of serious damage to rabbit eyes.

Corrosivity : Causes burns.

Sensitisation : Guinea pig  
 No sensitization.

Repeated dose toxicity : Not classified

Carcinogenicity : Not classified  
 Not carcinogenic in rats and mice.

Mutagenicity : Not classified  
 In vitro tests did not show mutagenic effects.

### 5 % PAA mixture

Toxicity for reproduction : Not classified  
 No toxicity to reproduction.  
 rat, 30.4 mg / kg, NOAEL, fetotoxic effect, rat, 12.5 mg / kg, NOAEL, female, Oral, 13 weekend packages rat, 0.75 mg / kg NOAEL

## SECTION 12: Ecological information

### 12.1. Toxicity

Jet 5	
LC50 Fishes ( <i>Lepomis macrochirus</i> )	1.1 mg/l (96h)
EC50 Daphnia	0.73
EC50 ( <i>Pseudokirchneriella subcapitata</i> )	0.16 mg/l, 72 (96 h)

### 12.2. Persistence and degradability

Jet 5	
Persistence and degradability	Air, t 1/2 ca. 2.6 d Result: The product can be degraded by abiotic (e.g. chemical or photolytic) processes. Water, Result: Chemical degradation Soil, Result: Chemical degradation
Biodegradation	Aerobic: Result: Biodegradable Effects on waste water treatment plants Result: inhibitory action

### 12.3. Bioaccumulative potential

Jet 5	
Log Pow	log Pow: -1.25, Method: calculated value log Pow: -0.52, Method: measured value
Bioaccumulative potential	Not bioaccumulable.

### 12.4. Mobility in soil

Jet 5	
Log Koc	0.63
Ecology - soil	- Soil / Sediment, no significant adsorption - Air, Volatility, Henry constant (H), 0.22 hPa.m <sup>3</sup> / mol is not significant.

### 12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulative (vPvB).

### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods : Apply triple washing procedure of the empty container and place the rinse water in the tank or container where the mixture is prepared. Handle empty containers and waste as established by the competent authorities.

### SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

#### 14.1. UN number

UN-No. : 3149

UN-No.(IATA) : 3149

#### 14.2. UN proper shipping name

Proper Shipping Name : HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE STABILIZED (Peracetic acid)

Transport document description : UN 3149 HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE STABILIZED (Peracetic acid), 5.1 (8), II, (E)

#### 14.3. Transport hazard class(es)

Class (UN) : 5.1

Class (IATA) : 5.1 - Oxidizing substances

Hazard labels (UN) : 5.1, 8



Division (IATA) : 5.1

#### 14.4. Packing group

Packing group (UN) : II

#### 14.5. Environmental hazards

Other information : No supplementary information available.

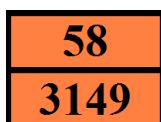
#### 14.6. Special precautions for user

##### 14.6.1. Overland transport

Hazard identification number (Kemler No.) : 58

Classification code (UN) : OC1

Orange plates :



Special provision (ADR) : 196, 553

Transport category (ADR) : 2

Tunnel restriction code : E

Limited quantities (ADR) : 1L

Excepted quantities (ADR) : E2

##### 14.6.2. Transport by sea

No additional information available

##### 14.6.3. Air transport

No additional information available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

#### 15.1.2. National regulations

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Change date	Previous Version	Section	Changed Item	Change	Comments
18/02/2014	2.0	2	S28	Added	
28/02/2014	2.1	2.2	S26	Added	

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Org. Perox. D	Organic Peroxides, Type D
Ox. Liq. 1	Oxidising Liquids, Category 1
Ox. Liq. 2	Oxidising Liquids, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H226	Flammable liquid and vapour
H242	Heating may cause a fire
H271	May cause fire or explosion; strong oxidizer
H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H400	Very toxic to aquatic life
R10	Flammable

R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R20/22	Harmful by inhalation and if swallowed
R22	Harmful if swallowed
R35	Causes severe burns
R41	Risk of serious damage to eyes
R5	Heating may cause an explosion
R50	Very toxic to aquatic organisms
R7	May cause fire
R8	Contact with combustible material may cause fire
C	Corrosive
N	Dangerous for the environment
O	Oxidising
Xi	Irritant
Xn	Harmful

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*