

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

Distributor:

CERTIS UK

Suite 5, 3 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

Website: www.certiseurope.co.uk

1.4. Emergency telephone number

Emergency number : Certis Carechem24 multilingual 24 hours emergency number: +44 (0) 870 190 6777.

For further advice for medical professionals:

The National Poisons Information Service: +44 (0) 870 600 6266.

For further advice for veterinary surgeons: +44 (0) 20 7635 9195

Dublin - National Poisons Information Centre, Beaumont Hospital, Dublin 9:

Available from 8 am to 10 pm - 7 days: +353 (01) 809 2166

Available 24hrs: +353 (01) 809 2566

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Ox. Sol. 2 H272

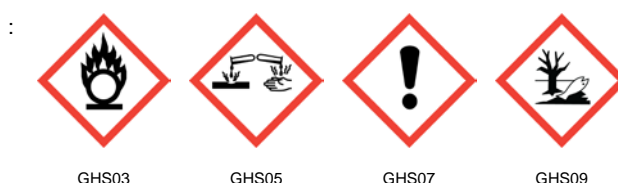
Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Dermal)	H312
Acute Tox. 4 (Inhalation)	H332
Skin Corr. 1A	H314
Eye Dam. 1	H318
STOT SE 3	H335
Aquatic Chronic 1	H410

Full text of hazard classes and H-statements : 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; oxidiser.
 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, hot surfaces, sparks, open flames and other ignition sources. 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-statements

: 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	% (w/w)	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 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 (CO₂).

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.
 - No special requirement for electric facility and machines. The product is not flammable.
 - No special requirement against electrostatic charge. The product is not flammable.
- Packing material : Stainless steel cleaned and passived . Approved grades of HDPE.
- Storage temperature : < 30°C

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
Other information on limit values		Fresh water, 0.000224 mg/l Sewage treatment plants, 0.051 mg/l Fresh water sediment, 0.00018 mg/kg Soil, 0.320 mg/kg Workers, Inhalation, Systemic effects, Short-term exposure, Long-term exposure, 0.6 mg/m3 Workers, Inhalation, Local effects, Short-term exposure, Long-term exposure, 0.6 mg/m3 Workers, Dermal, Local effects, Short-term exposure, 0.12 % Consumers, Inhalation, Systemic effects, Short-term exposure, Long-term exposure, 0.6 mg/m3 Consumers, Inhalation, Local effects, Long-term exposure, 0.6 mg/m3 Consumers, Inhalation, Local effects, Short-term exposure, 0.3 mg/m3 Consumers, Dermal, Local effects, Short-term exposure, 0.12 %

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

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 ³ 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 (EN 15154) Provide appropriate exhaust ventilation at machinery.
Hand protection	: Nitrile Gauntlet chemical protective Gloves (Approved to BS EN 388: 2003, EN 1149 – 1 1996 and Anti Static properties EN 407: 204)
Eye protection	: Chemical resistant goggles (Approved to EN 166 1B 345)
Skin and body protection	: PVC Chemical Resistant Boiler Suit (Approved to BS EN 466: 1995 Type 3) Chemical protective clothing with 'liquid – tight' (Type 3) connections. PVC with rubber safety wellington boot (Approved to EN ISO 20345 -200 joule-)
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 141:2000), 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
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Colour	: Colourless.
Odour	: Pungent.
pH	: < 2
Freezing point	: ca. -42 °C (calculated value)
Boiling point	: ca.105 °C (calculated value)
Flash point	: 74 - 83 °C (closed cup)
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 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
Explosive properties	: It is not explosive.
Oxidising properties	: Oxidizer.

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

5 % PAA mixture

LC50 inhalation rat	4.08 mg/l/4h
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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.
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 ³ / 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 : 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

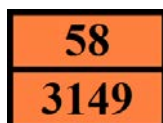
14.5. Environmental hazards

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

Source of information : Proxitane AHC Safety Data Sheet of Solvay. Review date: 05.12.2014. Version 2.0

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	
22/11/2016	3.1	7.2	Special requirements for electric facility and machines. Measures against electrostatic charge. Storage temperature: <30°C	Added	
		8.2	Updated		According to Solvay recommendations.
24/04/2018	3.2	1.3	Emergency number	updated	

Full text of 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
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
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
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
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
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects